AIR NATIONAL GUARD

2011

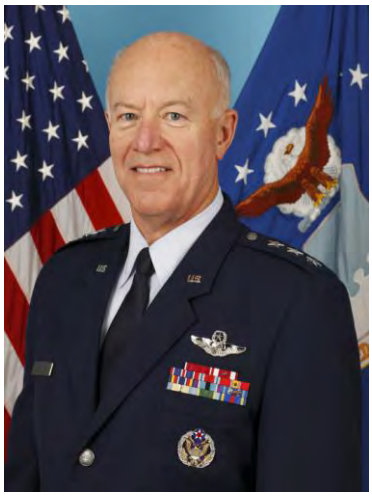
DOMESTIC OPERATIONS
EQUIPMENT REQUIREMENTS

GUARDING AMERICA * DEFENDING FREEDOM

Foreword

The effects of recent and recurring natural and manmade disasters have drawn new attention to the dual role of the Air National Guard in defending US interests abroad and assuring the safety and security of the fifty-four states, territories, and District of Columbia. The Air National Guard's role in National Guard Support to Civil Authorities is to save lives, prevent human suffering, and mitigate great property damage as a fully integrated member of the National Guard team.

The Air National Guard Domestic Operations Equipment Requirements Conference is a testament of teamwork. All "54" are represented to review the National Response Framework eight key threat scenarios and determine the "top five material capability gaps" and the "top five non-material issues" for Air National Guard Domestic Operations for each Emergency Support Function. Last year, this field-driven process identified almost $600 million in equipment requirements of which we have already earmarked $30 million to support Domestic Operations. For this Conference, the approach was to expand our efforts in outlining the Air National Guard strategy for Domestic Operations, widening our audience to include more joint participation and strengthening our linkages to the civil support team using the Emergency Support Functions framework. While the 2009 Domestic Operations Equipment Requirements Conference produced a book categorized under eight Emergency Support Functions, the inclusion of Incident Awareness and Assessment for the 2010 Domestic Operations Equipment Requirements Conference has expanded the list to ten. Another conference improvement this year was the appointment of Emergency Support Functions Chairs and Vice Chairs. They provided an in-depth ANG enterprise-wide out-brief, identifying over 50 critical material capability gaps and over 40 critical non-material issues.



Our Emergency Support Functions Chairs and Vice Chairs, and the Air National Guard Functional Area Managers, have come together and taken passionate ownership of this field-driven process, producing a document that they all can truly be proud of. It has been said that being lucky is really "where preparation meets opportunity" and this second Domestic Operations Equipment Requirements Conference will provide the Air National Guard a proactive way to discover many opportunities to serve the citizens of this great country, through a deliberate and methodical approach to determine field-driven requirements.

HARRY M. WYATT III
Lieutenant General, USAF
Director, Air National Guard

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Introduction

The 2nd Annual ANG Domestic Operations Equipment Requirements (DOERs) Conference and ANG DOERs Book

Ongoing overseas commitments and expanding domestic responsibilities for the Air National Guard (ANG), in conjunction with increased awareness from political leaders, make it essential to maintain focus on the strategy for the ANG's support to civil authorities. Department of Defense (DoD) Directive 5105.77, National Guard Bureau (NGB), May 21, 2008, makes significant provisions for increasing the influence of the National Guard (NG) in matters of support to civil authorities. This legislation, together with the FY08 National Defense Authorization Act forms the necessary foundation for a robust ANG strategy for National Guard Support to Civil Authorities (NGSCA). The acronym NGSCA is only resident in the "draft" ANG Strategy for National Guard Support to Civil Authorities. However, it clearly addresses the category of NG capabilities granted by the National Guard Empowerment Act. Under this act, the Chief, National Guard Bureau, has the authority to facilitate and coordinate the use of non-federalized NG forces for operations conducted under Title 32 or in support of state missions (State Active Duty). The Defense Support of Civil Authorities (DSCA) refers to Titles 10 and 32 use of the NG. It is estimated that 93% of NG support to states during disaster operations is in State Active Duty status; therefore, the term NGSCA provides a much clearer picture of the NG's support of states during domestic incident responses.

This year's second annual DOERs Conference hosted over 460 military and civilian attendees representing all 54 states, territories, the District of Columbia, Federal Emergency Management Agency (FEMA) regions and Emergency Support Functions (ESFs). The conference goal was to define and document ANG capability shortfalls for domestic operations. ANG field experts identified critical capabilities by drawing on a vast pool of experience and an understanding of the domestic mission at the local, state and regional level.

This year's DOERs book is organized along ESFs. This allows for an easier discussion of ANG capabilities and needs in the context of the Department of Homeland Security / FEMA construct. Posturing of NG resources across FEMA regions facilitates rapid access to critical consequence management capabilities. The State / FEMA Matrix identifies states and FEMA regions projected to receive critical capability requirements. The remaining sections of the book are the specific ESF Tabs that include information papers on each required capability classified as "Critical" (delivery in less than 3 years). Each paper addresses: **Background** - capability description; **Requirement Source** - determines need; **Impact if Not Funded**; **Units Impacted** - units that would be included in the receipt of capability; **Contractor** - current contractor if identified; **Contingency Supported - Previous Usage**; and **Cost** - funding required.

The DOERs process, including the annual conference and associated requirements book, is the cornerstone of a vision that will equip and posture the ANG as an unparalleled partner to civil agencies in times of domestic distress. This book follows a new naming convention. Unlike last year's book, the 2011 DOERs Book is based on the results of the 2010 DOERs Conference.

Domestic Operations Equipment Requirements

TRANSPORTATION (ESF #1)	Type Funds	Units Required	Unit Cost	Program Cost
All Terrain Forklifts and Aircraft Loaders				
All-Terrain 10K Forklift	3080	92	$172,032.00	$15,826,944.00
Aircraft Loader 60K	3080	10	$2,072,125.00	$20,721,250.00
Domestic Operations Vehicles				
Trucks	3080	567	$46,000.00	$26,082,000.00
32' Trailers	3080	89	$22,000.00	$1,958,000.00
20' Trailers	3080	405	$19,000.00	$7,695,000.00
R-11 Fuel Servicing Tank Truck Adapters	3080	184	$200.00	$36,800.00
TOTAL				$72,319,994.00

COMMUNICATIONS (ESF #2)	Type Funds	Units Required	Unit Cost	Program Cost
Interoperable National Incident Management System (NIMS)-Compliant Communications Equipment	3080	18	$650,000.00	$11,700,000.00
TOTAL				$11,700,000.00

PUBLIC WORKS AND ENGINEERING (ESF #3)	Type Funds	Units Required	Unit Cost	Program Cost
Prime Power Team	3080	162	$73,171.00	$11,853,702.00
Airfield and Route Clearance Equipment	3080	3	$1,500,000.00	$4,500,000.00
Potable Water Production and Storage Equipment	3080	16	$330,000.00	$5,280,000.00
Explosive Ordnance Disposal (EOD) Equipment	3080	17	$1,500,000.00	$25,500,000.00
Expedient Facilities	3080	10	$1,400,000.00	$14,000,000.00
TOTAL				$61,133,702.00

FIREFIGHTING (ESF #4)	Type Funds	Units Required	Unit Cost	Program Cost
P-22 Rescue / Pumper	3080	49	$450,000.00	$22,050,000.00
4F9FX Firefighting Support Kits	3080	20	$75,000.00	$1,500,000.00
Aircraft Rescue Firefighting Vehicles	3080	47	$750,000.00	$35,250,000.00
Personal Protective Equipment for Structural Firefighting	3080	4000	$2,500.00	$10,000,000.00
TOTAL				$68,800,000.00

EMERGENCY MANAGEMENT (ESF #5)	Type Funds	Units Required	Unit Cost	Program Cost
Mobile Emergency Operations Center (MEOC)				
Self Propelled MEOC	3080	25	$800,000.00	$20,000,000.00
Trailer Mounted MEOC	3080	29	$580,000.00	$16,820,000.00
Liaison Command and Control Kit	3080	57	$30,000.00	$1,710,000.00
Common Operating Picture (COP)	3080	146	$27,397.00	$3,999,962.00
Biological Agent Detection	3080	67	$50,000.00	$3,350,000.00
TOTAL				$45,879,962.00

MASS CARE, EMERGENCY ASSISTANCE, HOUSING, AND HUMAN SERVICES (ESF #6)	Type Funds	Units Required	Unit Cost	Program Cost
Fatality Search and Recovery Teams (FSRTs) Temporary Storage Trailers for Human Remains	3080	54	$50,000.00	$2,700,000.00
Mass Care, Emergency Assistance Equipment	3080	95	$80,000.00	$7,600,000.00
Disaster Relief Beddown Sets (DRBS)	3080	10	$2,200,000.00	$22,000,000.00
TOTAL				$32,300,000.00

PUBLIC HEALTH AND MEDICAL SERVICES (ESF #8)	Type Funds	Units Required	Unit Cost	Program Cost
Early Response Capability (Golden Hour - Emergency Treatment & Triage) to Domestic Mass Casualty Event	**3080**	**89**	**$56,000.00**	**$4,984,000.00**
Modernization of Existing Expeditionary Medical Support (EMEDS) Medical Assemblages				
EMEDS	**3080**	**9**	**$903,849.00**	**$8,134,641.00**
EMEDS+25	**3080**	**6**	**$250,251.00**	**$1,501,506.00**
Oxygen Solution	**3080**	**3**	**$113,081.00**	**$339,243.00**
Water Dist	**3080**	**3**	**$28,582.00**	**$85,746.00**
EMEDS PEDS/GERIATRICS/HRT	**3080**	**3**	**$132,084.00**	**$396,252.00**
Air Transportable Clinic (ATC)	**3080**	**6**	**$37,452.00**	**$224,712.00**
CP EMEDS	**3080**	**3**	**$121,074.00**	**$363,222.00**
NG CERFP/HRF	**3080**	**17**	**$240,000.00**	**$4,080,000.00**
Fatality Search and Recovery Team (FSRT) Equipment	**3080**	**27**	**$611,000.00**	**$16,497,000.00**
Interoperable Communications Suite	**3080**	**9**	**$30,000.00**	**$270,000.00**
TOTAL				**$36,876,322.00**
SEARCH AND RESCUE (ESF #9)	**Type Funds**	**Units Required**	**Unit Cost**	**Program Cost**
Urban Search and Rescue	**3080**	**20**	**$1,100,000.00**	**$22,000,000.00**
Urban Search and Rescue Dedicated Vehicles	**3080**	**80**	**$40,000.00**	**$3,200,000.00**
TOTAL				**$25,200,000.00**
OIL AND HAZARDOUS MATERIALS RESPONSE (ESF #10)	**Type Funds**	**Units Required**	**Unit Cost**	**Program Cost**
HAZMAT Response Package	**3080**	**27**	**$2,500.00**	**$67,500.00**
Personal Protective Equipment (PPE) for Support Personnel	**3080**	**2000**	**$2,500.00**	**$5,000,000.00**
TOTAL				**$5,067,500.00**
PUBLIC SAFETY AND SECURITY (ESF #13)	**Type Funds**	**Units Required**	**Unit Cost**	**Program Cost**
Security Forces (SF) Vehicles				
Mid Size Vehicles	**3080**	**1700**	**$75,000.00**	**$127,500,000.00**
Large Size Vehicles	**3080**	**500**	**$125,000.00**	**$62,500,000.00**
Enhanced Security and Traffic Control Kits				
Enhanced Security Kits	**3080**	**600**	**$6,000.00**	**$3,600,000.00**
Traffic Control Kits	**3080**	**600**	**$4,000.00**	**$2,400,000.00**
Less-Than-Lethal Equipment				
Crowd Control/Civil Disturbance Kits	**3080**	**400**	**$20,000.00**	**$8,000,000.00**
Tasers	**3080**	**4000**	**$600.00**	**$2,400,000.00**
Security Forces Small Arms (M-9)	**3080**	**2500**	**$400.00**	**$1,000,000.00**
TOTAL				**$207,400,000.00**
INCIDENT AWARENESS AND ASSESSMENT (IAA)	**Type Funds**	**Units Required**	**Unit Cost**	**Program Cost**
Fully Mission Capable Incident Awareness and Assessment (IAA) Platforms And Sensors				
Block 30 Upgrade to RC-26B	**3080**	**11**	**$3,520,000.00**	**$38,720,000.00**
VDL Kits for Targeting Pods	**3080**	**92**	**$95,000.00**	**$8,740,000.00**
Unclassified Processing, Analysis, and Dissemination (PAD) System	**3080**	**13**	**$500,000.00**	**$6,500,000.00**
Unclassified Processing, Analysis, and Dissemination (PAD) Network				
Segovia VSAT Hardware	**3080**	**13**	**$50,000.00**	**$650,000.00**
Enterprise Wide, Yearly Dedicated 2048 Kbps Up/Down SATCOM Service	**3840**	**5**	**$600,000.00**	**$3,000,000.00**
Situational Awareness / Sense and Avoid Tools For Remotely Piloted Aircraft (RPA) Ground Control Stations (GCSs)	**3080**	**17**	**$50,000.00**	**$850,000.00**
ANG Distributed Ground Stations (DGS) Ground Receive Equipment for RC-26 IAA Operations				
High Gain Ground Stations, 3DL-GS-01	**3080**	**5**	**$200,000.00**	**$1,000,000.00**
AN/PRC 117G	**3080**	**5**	**$50,000.00**	**$250,000.00**
INMARSAT BGAN Connectivity	**3080**	**5**	**$100,000.00**	**$500,000.00**
Ecostorm Data Server Equipment	**3080**	**5**	**$200,000.00**	**$1,000,000.00**
TOTAL				**$61,210,000.00**
TOTAL ANG 2011 DOMESTIC OPERATIONS EQUIPMENT REQUIREMENTS				**$627,887,480.00**

State / FEMA Matrix

ESFs 1 - 6 / Regions 1 - 4

FEMA & State Region / Emergency Support Function	FEMA Region 1						FEMA Region 2				FEMA Region 3						FEMA Region 4							
	CT	MA	ME	NH	RI	VT	NJ	NY	PR	VI	DC	DE	MD	PA	VA	WV	AL	FL	GA	KY	MS	NC	SC	TN
ESF #1 - Transportation																								
Forklifts and Aircraft Loaders	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Domestic Operations Vehicles	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
R-11 Fuel Servicing Adapters	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #2 - Communications																								
NIMS - Compliant Comm		●	●		●					●				●			●		●			●		
ESF #3 – Public Works & Engineering																								
Prime Power Team														●										
Airfield & Route Clearance														●										
Potable Water Production				●				●						●	●			●				●		
Explosive Ordnance Disposal		●				●	●					●						●	●	●				
Expedient Facilities		●							●					●								●		
ESF #4 - Firefighting																								
P-22 Rescue / Pumper	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●
Firefighting Support Kits		●		●		●		●	●			●									●	●		
Aircraft Fire Fighting Vehicles	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●
PPE Structural Firefighting	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #5 - Emergency Management																								
Mobile Emergency Ops Ctr.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Liaison C2 Kit	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Common Operating Picture	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Biological Agent Detection	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #6 - Mass Care, Emergency Assistance, Housing, and Human Services																								
FSRT Temporary Storage		●		●				●	●					●	●	●	●	●	●	●				
Emergency Assistance Equip.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Disaster Relief Beddown Sets				●				●																

State / FEMA Matrix

ESFs 1 - 6 / Regions 5 - 8

FEMA & State Region / Emergency Support Function	FEMA Region 5						FEMA Region 6					FEMA Region 7				FEMA Region 8					
	IL	IN	MI	MN	OH	WI	AR	LA	NM	OK	TX	IA	KS	MO	NE	CO	MT	ND	SD	UT	WY
ESF #1 - Transportation																					
Forklifts and Aircraft Loaders	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Domestic Operations Vehicles	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
R-11 Fuel Servicing Adapters	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #2 - Communications																					
NIMS - Compliant Comm	●				●			●			●			●							
ESF #3 – Public Works & Engineering																					
Prime Power Team													●								
Airfield & Route Clearance													●								
Potable Water Production					●		●						●				●				
Explosive Ordnance Disposal				●		●					●				●	●	●	●		●	
Expedient Facilities					●		●						●				●				
ESF #4 - Firefighting																					
P-22 Rescue / Pumper	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●	●	●	●	●
Firefighting Support Kits					●		●			●		●			●		●	●			●
Aircraft Fire Fighting Vehicles	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●	●	●	●	●
PPE for Structural Firefighting	●	●	●	●	●	●	●			●	●	●	●	●	●	●	●	●	●	●	●
ESF #5 - Emergency Management																					
Mobile Emergency Ops Ctr.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Liaison C2 Kit	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Common Operating Picture	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Biological Agent Detection	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #6 - Mass Care, Emergency Assistance, Housing and Human Services																					
FSRT Temporary Storage	●	●		●	●	●		●			●			●	●	●				●	
Emergency Assistance Equip.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Disaster Relief Beddown Sets					●		●						●				●				

State / FEMA Matrix

ESFs 1 - 6 / Regions 9 - 10

FEMA & State Region / Emergency Support Function	FEMA Region 9					FEMA Region 10			
	AZ	CA	GU	HI	NV	AK	ID	OR	WA
ESF #1 - Transportation									
Forklifts and Aircraft Loaders	●	●	●	●	●	●	●	●	●
Domestic Operations Vehicles	●	●	●	●	●	●	●	●	●
R-11 Fuel Servicing Adapters	●	●	●	●	●	●	●	●	●
ESF #2 - Communications									
NIMS - Compliant Comm		●		●					●
ESF #3 – Public Works & Engineering									
Prime Power Team		●							
Airfield & Route Clearance		●							
Potable Water Production		●	●						
Explosive Ordnance Disposal		●						●	
Expedient Facilities		●							●
ESF #4 - Firefighting									
P-22 Rescue / Pumper	●	●			●	●	●	●	
Firefighting Support Kits		●					●	●	
Aircraft Fire Fighting Vehicles	●	●			●	●	●	●	
PPE for Structural Firefighting	●	●			●	●	●	●	
ESF #5 - Emergency Management									
Mobile Emergency Ops Ctr.	●	●	●	●	●	●	●	●	●
Liaison C2 Kit	●	●	●	●	●	●	●	●	●
Common Operating Picture	●	●	●	●	●	●	●	●	●
Biological Agent Detection	●	●	●	●	●	●	●	●	●
ESF #6 - Mass Care, Emergency Assistance, Housing, and Human Services									
FSRT Temporary Storage		●		●	●			●	●
Emergency Assistance Equip.	●	●	●	●	●	●	●	●	●
Disaster Relief Beddown Sets									●

State / FEMA Matrix

ESFs 8 - 10, 13 & IAA / Regions 1 - 4

FEMA & State Region / Emergency Support Function	FEMA Region 1						FEMA Region 2				FEMA Region 3						FEMA Region 4							
	CT	MA	ME	NH	RI	VT	NJ	NY	PR	VI	DC	DE	MD	PA	VA	WV	AL	FL	GA	KY	MS	NC	SC	TN
ESF #8 - Public Health and Medical Services																								
Golden Hour Treatment	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
EMEDS Modernization		●		●				●	●					●	●	●	●	●	●	●				
FSRT Equipment		●		●				●	●					●	●	●	●	●	●	●				
Interoperable Communications														●										
ESF #9 - Search and Rescue																								
Urban Search and Rescue		●		●				●						●	●		●	●	●	●				
USAR Dedicated Vehicles		●		●				●						●	●		●	●	●	●				
ESF #10 - Oil and Hazardous Materials Response																								
HAZMAT Response Package		●		●				●	●					●	●	●	●	●	●	●				
PPE For Support Personnel	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #13 - Public Safety and Security																								
Security Forces Vehicles	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Enhanced Traffic Control	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Less Than Lethal Equipment	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
SF Small Arms	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
IAA - Incident Awareness and Assessment																								
FMC Platforms and Sensors						●	●	●					●			●	●	●			●		●	
Unclassified PAD Systems		●													●		●		●					
Unclassified PAD Network		●													●		●		●					
Sense/Avoid Tools for RPA								●																
DGS for RC-26B IAA Operations		●															●							

State / FEMA Matrix

ESFs 8 - 10, 13 and IAA / Regions 5 - 8

FEMA & State Region / Emergency Support Function	FEMA Region 5						FEMA Region 6					FEMA Region 7				FEMA Region 8					
	IL	IN	MI	MN	OH	WI	AR	LA	NM	OK	TX	IA	KS	MO	NE	CO	MT	ND	SD	UT	WY
ESF #8 - Public Health and Medical Services																					
Golden Hour Treatment	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
EMEDS Modernization	●	●		●	●	●		●			●		●	●	●	●				●	
FSRT Equipment	●	●		●	●	●		●			●			●	●	●				●	
Interoperable Communications													●								
ESF #9 - Search and Rescue																					
Urban Search and Rescue	●			●	●			●			●			●	●	●				●	
USAR Dedicated Vehicles	●			●	●			●			●			●	●	●				●	
ESF #10 - Oil and Hazardous Materials Response																					
HAZMAT Response Package	●	●		●	●	●		●			●			●	●	●				●	
PPE For Support Personnel	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
ESF #13 - Public Safety and Security																					
Security Forces Vehicles	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Enhanced Traffic Control	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Less Than Lethal Equipment	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
SF Small Arms	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
IAA - Incident Awareness and Assessment																					
FMC Platforms and Sensors		●	●	●	●	●			●	●	●	●				●			●		
Unclassified PAD Systems		●			●		●				●		●							●	
Unclassified PAD Network		●			●		●				●		●							●	
Sense/Avoid Tools for RPA					●						●							●			
DGS for RC-26B IAA Operations		●											●								

State / FEMA Matrix

ESFs 8 - 10, 13 and IAA / Regions 9 - 10

FEMA & State Region / Emergency Support Function	FEMA Region 9					FEMA Region 10			
	AZ	CA	GU	HI	NV	AK	ID	OR	WA
ESF #8 - Public Health and Medical Services									
Golden Hour Treatment	●	●	●	●	●	●	●	●	●
EMEDS Modernization		●		●	●			●	●
FSRT Equipment		●		●	●			●	●
Interoperable Communications									●
ESF #9 - Search and Rescue									
Urban Search and Rescue					●				●
USAR Dedicated Vehicles					●				●
ESF #10 - Oil and Hazardous Materials Response									
HAZMAT Response Package		●		●	●			●	●
PPE For Support Personnel	●	●	●	●	●	●	●	●	●
ESF #13 - Public Safety and Security									
Security Forces Vehicles	●	●	●	●	●	●	●	●	●
Enhanced Traffic Control	●	●	●	●	●	●	●	●	●
Less-Than-Lethal Equipment	●	●	●	●	●	●	●	●	●
SF Small Arms	●	●	●	●	●	●	●	●	●
IAA - Incident Awareness and Assessment									
FMC Platforms and Sensors	●	●				●	●		●
Unclassified PAD Systems		●		●	●				
Unclassified PAD Network		●		●	●				
Sense/Avoid Tools for RPA	●	●							
DGS for RC-26B IAA Operations					●				

Emergency Support Functions (ESFs) and National Guard Bureau Essential 10

The ESFs provide the structure for coordinating federal interagency support for a federal response to an incident. They are mechanisms for grouping functions most frequently used to provide federal support to states and federal-to-federal support, both for declared disasters and emergencies under the Stafford Act and for non-Stafford Act incidents. The National Response Framework has designated fifteen ESFs to support domestic incident response. The chart below shows which National Guard Bureau "Essential 10" capabilities are included in each of the ESFs. It is critical that local, state, and National Guard planners understand the National Incident Management System (NIMS) and the ESFs to ensure full use of state resources to provide a seamless incident response. The following pages include ten ESF Tabs including information papers on capability needs. Also included is a tab covering Incident Awareness and Assessment (IAA). While not an ESF, IAA provides critical capabilities during domestic incident response.

National Response Framework (NRF) Emergency Support Function (ESF)	**National Guard "Essential 10" Capability**
ESF #1 - Transportation	Transportation, Aviation/Airlift
ESF #2 - Communications	Communications
ESF #3 - Public Works and Engineering	Engineering
ESF #4 - Firefighting	Engineering, Aviation/Airlift
ESF #5 - Emergency Management	Command and Control
ESF #6 - Mass Care, Emergency Assistance, Housing, and Human Services	Logistics, Maintenance
ESF #7 - Logistics Management and Resource Support (not included in this book)	Logistics, Maintenance
ESF #8 - Public Health and Medical Services	Medical, Maintenance
ESF #9 - Search and Rescue	Engineering, Aviation/Airlift
ESF #10 - Oil and Hazardous Materials Response	Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) Response
ESF #11 - Agriculture and Natural Resources (not included in this book)	Logistics, Medical
ESF #12 - Energy (not included in this book)	Maintenance, Logistics
ESF #13 - Public Safety and Security	Security, Aviation/Airlift
ESF #14 - Long-Term Community Recovery (not included in this book)	Command and Control
ESF #15 - External Affairs (not included in this book)	Command and Control

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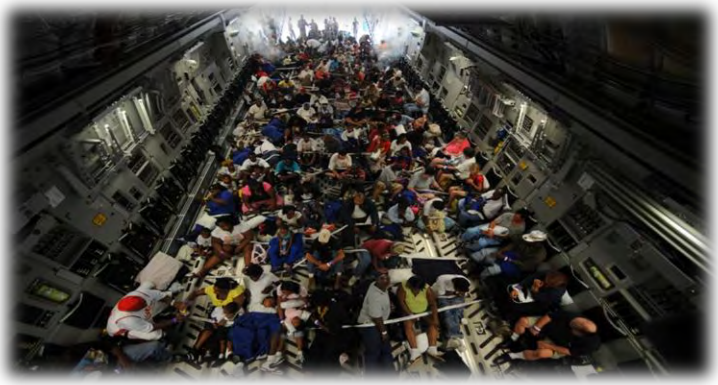
Transportation

Transportation (ESF #1) - Transportation assists federal agencies, state and local governmental entities, and voluntary organizations requiring transportation capacity to perform response missions following a major disaster or emergency. ESF #1 also serves as a coordination point between response operations and restoration of the transportation infrastructure. It includes aviation/airspace management and transportation safety; restoration / recovery of transportation infrastructure; movement restrictions; and damage and impact assessment.

A major disaster may severely damage the civil transportation system throughout the impacted area. Most local transportation activities will be hampered by damaged facilities, equipment, and infrastructure, as well as disrupted communications. At the same time, the disaster will create significant demands for national, regional, and local transportation of resources to provide for relief and recovery. Federal assistance may be required to meet these demands for movement of essential resources, as well as for clearing and restoration of the transportation system.



This ESF supports transport of units, personnel, and/or materiel from a specified origin to a specified destination within a specified timeframe. Attributes include the transport of heavy equipment; assets to transport personnel from the affected area; assets to transport cargo: bulk, palletized, water, Petroleum, Oil and Lubricants (POL); unimproved, damaged, obstructed, flooded surface transport; and medical transport.

Transportation
2010 Domestic Operations Equipment Requirements Conference

Critical Domestic Operations Capabilities List

- All-Terrain Materiel Handling Equipment (Forklifts and Aircraft Loaders) at Each Wing for Aircraft On-Load/Off-Load Capability and Timeliness
- Dedicated Trucks and Trailers for Joint Incident Site Communications Capability (JISCC) and Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Enhanced Response Force Packages (CERFP) and Homeland Response Force (HRF) packages
- R-11 Fuel Servicing Tank Truck Adapters for Organic Servicing of Tactical Vehicles

Essential Domestic Operations Capabilities List

- Joint and Interoperable Communications Equipment Linking Military Services and Civilian Agencies to Meet Civil Support Mission
- Joint Situational Awareness and Command & Control for Fielded Forces and Equipment
- Fully Integrated In-Transit Visibility (ITV) System for ARNG/ANG Interoperability such as Blue Force Tracker (BFT) and Battle Command Sustainment Support System (BCS3)
- Enhanced Snow-Clearing/Removal Vehicles
- HMMWV Snow Plows

TRANSPORTATION EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

Program	P.E. Number	2012	2013	2014	2015	2016	Total
All-Terrain Forklifts and Aircraft Loaders	52844F	$12.18	$12.18	$12.19	-	-	$36.55
Domestic Operations Vehicles	52844F	$11.91	$11.91	$11.92	-	-	$35.74
R-11 Fuel Servicing Tank Truck Adapters	52844F	$0.04	-	-	-	-	$0.04

Note: All are 3080 Appropriation (Other Procurement)

- All-Terrain Materiel Forklifts and Aircraft Loaders - Enhances ability to on-load/off-load aircraft during critical response timeframes
- Domestic Operations Vehicles - Provides for rapid organic deployment of force package personnel and equipment sets
- R-11 Fuel Servicing Tank Truck Adapters - Provides each wing the ability to organically refuel responding vehicles within the area of operation

INFORMATION PAPER

ON

ALL-TERRAIN FORKLIFTS AND AIRCRAFT LOADERS

1. Background. One of the Air National Guard's (ANG) core transportation capabilities is the ability to on-load and off-load aircraft. During a domestic operation, this capability will be critical to the success of the response. However, each ANG unit's capacity is limited to its peacetime training mission. In order to effectively respond to a domestic emergency, each unit should have the ability to rapidly handle inbound and outbound aircraft. Wings should be equipped with one additional all-terrain forklift compatible with all tactical aircraft, operable on any airfield, in any weather, and versatile enough to forward deploy when needed. Each FEMA region should also have one additional aircraft loader strategically based to support the most likely cargo staging bases.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference.

3. Impact if Not Funded. Diminished ANG ability to rapidly on-load and off-load aircraft during emergency responses resulting in slowed recovery efforts and increased suffering.

4. Units Impacted. Eighty-eight (88) wings and four (4) Combat Readiness Training Centers.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Hurricanes Katrina, Rita, and Ivan, Democratic and Republican National Conventions, Olympics, Super Bowl, G8/G20 Summits, Presidential Inauguration, Operation JUMP START.

7. Cost.

Units Required	Unit Cost	Program Cost
92 TRK FL 10K AT 463L	**$172,032**	**$15,826,944**
10 ACFT LOADER 60K 463L	**$2,072,125**	**$20,721,250**
Total		**$36,548,194**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

DOMESTIC OPERATIONS VEHICLES

1. Background. Joint Incident Site Communications Capability (JISCC) and National Guard Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Enhanced Response Force Packages (CERFP) and Homeland Response Force (HRF) forces are among the first and most critical packages to deploy prior to or following a domestic event. Events range from natural and man-made disasters to Presidential Inaugurations and international summits. These packages have proven their worth and the need continues to grow both in capability and frequency. Both the JISCC and CERFP/HRF have exceeded their current trailer space and leased vehicle towing capacity. Some trailers are not airworthy and the trucks, because they are leased, cannot be configured for their mission or easily deployed in support of no-notice taskings. Tactical vehicles are not an option because they are not compatible with low-hitch trailers. The ANG has no inherent capability to provide vehicles for domestic operations support. To be effective, these packages require trucks with crew cabs, diesel engines, four-wheel drive, dual rear wheels, and heavy-duty tow and suspension kits. They also require enclosed trailers that are certified for movement via military aircraft, have a minimum 10,000 pound load capacity, rear drop door, side door, E-Track tie-down system, internal climate control, and internal / external power 110 volt connections. These vehicles would also meet dual use (domestic and defense) operations requirements.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference.

3. Impact If Not Funded. JISCC and CERFP/HRF packages will not have the capability to rapidly respond to domestic operations and will be forced to rely on limited capability or ad hoc vehicles. This will directly impact the mission, and have a negative impact on mission success.

4. Units Impacted. All fifty-four (54) states, territories, and the District of Columbia operate JISCC packages; all FEMA regions operate CERFP/HRF sets.

5. Contractor. Haulmark, Bristol, IN (trailers).

6. Contingency Supported - Previous Usage. Hurricanes Katrina, Rita, and Ivan, American Samoa Tsunami, Democratic and Republican National Conventions, Olympics, Super Bowl, G8/G20 Summits and Presidential Inaugurations.

7. Cost.

Units Required	Unit Cost	Program Cost
567 Trucks	**$ 46,000**	**$ 26,082,000**
89 Trailers, 32'	**$ 22,000**	**$ 1,958,000**
405 Trailers, 20'	**$ 19,000**	**$ 7,695,000**
Total		**$ 35,735,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

R-11 FUEL SERVICING TANK TRUCK ADAPTERS

1. Background. All Air National Guard (ANG) flying wings are equipped with R-11 Fuel Servicing Tank Trucks. These trucks are designed to fuel aircraft not vehicles. However, recent domestic operations requirements have identified such a need. Within a few minutes, each truck can be converted to a mobile gas station with gas station style nozzles capable of servicing ANG tactical vehicles and diesel trucks greatly extending the ANG operational reach. Tactical vehicles and tractor trailers normally carry approximately 100 gallons of fuel. However, an R-11 hauling 6,000 gallons can be a significant force multiplier especially in an area of operations where there is no power or workers to operate local gas stations.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference.

3. Impact If Not Funded. ANG units will not have wing level capability to support domestic operations and will be forced to rely upon limited commercial/contracted assets that may not be readily available during natural or man-made disasters. The ANG will lack the fueling equipment necessary to respond to many types of domestic events. The lack of these fueling nozzles will directly impact the ANG's ability to sustain operations and will have a direct negative impact on mission success.

4. Units Impacted. Eighty-eight (88) wings and four (4) Combat Readiness Training Centers.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. New capability. Supports transportation during all domestic operations.

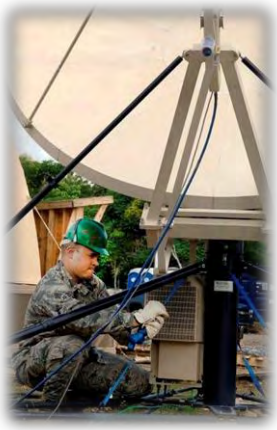
7. Cost.

Units Required	Unit Cost	Program Cost
184 Fueling Adapters	**$200**	**$36,800**

Note: All are 3080 Appropriation (Other Procurement)

Communications

Communications (ESF#2) - Communications ensures the provision of federal telecommunications support to federal, state, and local response efforts following a presidentially declared major disaster, emergency, or extraordinary situation under the National Response Framework (NRF). This ESF supplements the provisions of the National Plan for Telecommunications Support in Non-Wartime Emergencies, hereafter referred to as the National Telecommunications Support Plan (NTSP). It includes coordination with telecommunications and information technology industries; restoration and repair of telecommunications infrastructure; protection, restoration, and sustainment of national cyber and information technology resources; and oversight of communications within the federal incident management and response structures.



A disaster condition may result from a significant natural disaster, nuclear accident, or any other incident that causes extensive damage and / or results in a high volume of requests from all levels of government authority for services required to save lives and alleviate human suffering. These authorities require accurate and timely information on which to base decisions and guide response actions. Concurrently, commercial telecommunications facilities may sustain widespread damage. At a time when the need for real-time electronically processed information is greatest, the capability to acquire it may be seriously restricted or nonexistent. All surviving telecommunications assets of the various levels of government, augmented by extra-regional assets, will be needed immediately to ensure a proper response to the needs of victims of a disaster event.

The Air National Guard is able to provide significant augmentation through its extensive communication resources. These include communications networks and information services that enable joint and multinational domestic operations support and war fighting capabilities. Much of the communications equipment required by the States in response to domestic operations is to ensure situational awareness and connectivity to other responders within the Incident Command System (ICS).

Communications
2010 Domestic Operations Equipment Requirements Conference

Critical Domestic Operations Capabilities List

- Interoperable National Incident Management System (NIMS) Compliant Communications with ANG/ARNG and Civilian Agencies

  NOTE: All Emergency Support Functions (ESFs) identified National Incident Management System (NIMS)-Compliant Communications capability as a top priority. In a collective meeting of all ESF Panel Chairs, NGB/A6 took on the responsibility of writing the NIMS-Compliant Communications information paper in support of all ANG DOERs Book ESFs.

- Man-Portable Initial Entry Package: Voice, Data, Imagery

Essential Domestic Operations Capabilities List

- Need Organic Expeditionary NIMS Compliant Communications Equipment for Homeland Response Force (HRF)
- Protect NG Personnel from Exposure to Hazardous Conditions While Ensuring Continuity of Duty Operations (COOP) - Expand Capabilities for Remote Work
- Create Ability to Support Network Defense of Civil Networks if Called Upon
- Tool Kit for Network-Defense Forensics and Attack Source Identification
- Ability to Conduct Operations when System Have Been Compromised
- Real-Time Scalable, Tailorable, Unclassified Common Operating Picture (COP: Voice, Data, Imagery)
- Long-Haul Wireless Communications
- Incident Awareness and Assessment (IAA) Capability

COMMUNICATIONS EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

Program	P.E. Number	2012	2013	2014	2015	2016	Total
Interoperable National Incident Management System (NIMS)-Compliant Communication Equipment	53111B	$3.90	$3.90	$3.90	-	-	$11.70

Note: All are 3080 Appropriation (Other Procurement)

- Interoperable National Incident Management System (NIMS)-Compliant Communication Equipment - Combat Communications units require additional suites of Initial Communications Element (ICE) Version 3 packages with satellite communications capability to support domestic operations. Suites will deploy to incident sites to provide critical command and control resources to incident commanders. Requirement was identified as a need by all Emergency Support Functions (ESFs).

INFORMATION PAPER

ON

INTEROPERABLE NATIONAL INCIDENT MANAGEMENT SYSTEM (NIMS)-COMPLIANT COMMUNICATION EQUIPMENT

1. Background. To provide proper command and control of National Guard Bureau (NGB) forces, whether presented for domestic security missions, disaster response or any other contingency, robust communications capability is required. The systems must provide the ability to share and manage information in near-real time with all NGB stakeholders, vertically (combatant commander, state, incident) and horizontally (interagency) as well as the ability to establish, maintain, and coordinate situational awareness of all NGB command, control, communications, and intelligence assets among NGB users and stakeholders. At a minimum it should provide voice and data communication between higher headquarters and the incident site first responders, be independent of terrestrial infrastructure, be National Incident Management System (NIMS) compliant, and be interoperable with all mission partners including federal, state, and local military and civil emergency response agencies supporting the full range of domestic response operations.

2. Requirement Sources. Lessons learned from domestic operations as well as efforts in support of Hurricanes Katrina, Rita, and Ivan. Interoperable communications was identified as the number two ANG capability gap at the 2010 DOERs Conference and supports all of the Emergency Support Functions.

3. Impact If Not Funded. Failure to procure this equipment significantly degrades mission effectiveness. This equipment allows NGB forces to communicate and integrate with all other responding agencies. The lack of interoperable communications for NGB will negatively impact the ability to establish and maintain command and control during domestic operation situations.

4. Units Impacted. Shortfalls impact the ability of all fifty-four (54) states, territories, and the District of Columbia to respond to contingencies. Equipment will be located at eighteen (18) Combat Communications Squadrons. See the State / FEMA Matrix for the specific states.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage: Hurricanes Katrina, Rita, and Ivan, G8/G20 Summits, Presidential Inauguration.

7. Cost.

Units Required	Unit Cost	Program Cost
18 Initial Communications Element (ICE) Version 3 Packages with SATCOM capability	**$650,000**	**$11,700,000**

Note: All are 3080 Appropriation (Other Procurement)

Public Works and Engineering

Public Works and Engineering (ESF #3) - The Department of Defense is the primary agency for providing the Public Works and Engineering Emergency Support Function technical assistance, engineering, and construction management resources during response activities. ESF#3 provides contracting support for construction management, inspection, and emergency repair of water treatment facilities (waste, potable, and ice) and electrical power facilities. Other contracting activities include providing support for real estate use, life-saving and life-sustaining actions, damage mitigation, and recovery activities following a major disaster.

In a major disaster or emergency response, operations may be beyond state and local response capabilities. Homes, public buildings, bridges, and other facilities may have to be reinforced or demolished to ensure safety, and public utilities may be partially or fully inoperable. A major disaster may affect the lives of many state and local response personnel and their facilities preventing them from performing their prescribed emergency response duties. Similarly, emergency response equipment in the immediate disaster area may be damaged or inaccessible. Therefore, sufficient resources may not be available to state and local agencies to meet emergency response requirements. Federal assistance may be required to identify and deploy resources from outside the affected area to ensure a timely, coordinated effective response.

Public Works and Engineering
2010 Domestic Operations Equipment Requirements Conference

Critical Domestic Operations Capabilities List

- Emergency Power Generation
- Airfield Recovery - Clearance and Repair
- Potable Water Supply, Generation, and Storage
- Explosive Ordnance Disposal (EOD)
- Expedient Facilities - Set Up and Maintain Improvised Facilities

Essential Domestic Operations Capabilities List

- Non-Lethal - Civil Disturbance Capability
- Short-term Expeditionary Housing - Immediately Deployable
- Emergency Airfield Lighting / Power Generation
- Temporary Morgue Facilities
- Refrigeration for Secure Vaccine Storage and Dispersal

Desired Domestic Operations Capabilities List

- Common Operating Picture - Plotting and Display
- Contaminated Waste Water Management

PUBLIC WORKS AND ENGINEERING EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

Program	P.E. Number	2012	2013	2014	2015	2016	Total
Prime Power Team	59297F	$3.95	$3.95	$3.95	-	-	$11.85
Airfield and Route Clearance Equipment	59297F	$3.00	$1.50	-	-	-	$4.50
Potable Water Production and Storage Equipment	59297F	$3.28	$2.00	-	-	-	$5.28
Explosive Ordnance Disposal (EOD) Equipment	59297F	$15.00	$10.50	-	-	-	$25.50
Expedient Facilities	59297F	$5.60	$5.60	$2.80	-	-	$14.00

Note: All are 3080 Appropriation (Other Procurement)

- Prime Power Team - Will deploy during disaster relief operations to provide stable power support, advice and technical assistance in all aspects of emergency electrical power and distribution systems.
- Airfield and Route Clearance Equipment - Equipment, such as chain saws, hand tools, personnel protection equipment, will add to effective relief operations clearing runways and roads of debris for relief personnel during disasters.
- Potable Water Production and Storage Equipment - Reverse Osmosis Water Purification Unit (ROWPU). This unit will provide purification up to 1500 gallons of potable water per hour in a disaster situation.
- Explosive Ordnance Disposal (EOD) Equipment - Includes communication, demolition, detection, and personal protective equipment to provide an effective EOD response to hazardous chemical, biological, radiological, nuclear, and explosive incidents throughout the United States and abroad.
- Expedient Facilities - Includes command and control, medical, and storage facilities. Facilities will include power generation and distribution, lighting, and basic latrine service.

INFORMATION PAPER

ON

PRIME POWER TEAM

1. Background. A prime power team consists of personnel and equipment that will deploy during a disaster relief operation to provide stable, reliable electrical power as well as advice and technical assistance in all aspects of emergency electrical power, electrical distribution systems and restoration of the permanent power grid. The team will provide limited installation, operation and maintenance of emergency power generation systems. The team will be capable of increasing and maintaining the emergency power over an extended period of time to emergency services facilities such as hospital centers, police stations and / or power the entire facility. The team can also provide emergency power support to a school or small college campus being used as an evacuation point or temporary shelter. Fifty-four (54) power generators of various sizes are required at each of the three locations.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference.

3. Impact if Not Funded. Adequate power would not be available to conduct effective recovery operations. This would lead to increased suffering of affected populace and slow overall recovery operations.

4. Units Impacted.

163 CES March, CA 190 CES Forbes Field, KS 201 RHS Ft Indiantown Gap, PA

5. Contractor. TBD.

6. Contingencies Supported - Previous Usage. Prime Power generation capability can provide stable power support to any natural disaster.

7. Cost.

Units Required	Unit Cost	Program Cost
162 Power Generators 15 KW-750 KW	**$73,171**	**$11,853,702**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

AIRFIELD AND ROUTE CLEARANCE EQUIPMENT

1. Background. During most natural disasters, there is a significant requirement to clear airfields, nearby roads and other access areas of debris. In addition, expeditious clearing of airfields and roads will speed up the recovery process. Clearance equipment includes chain saws, chop saws, hand tools, personnel protection equipment, ropes ladders, and other equipment found under Unit Type Codes (UTC) 4F9RY and 4F9RW.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference.

3. Impact if Not Funded. If airfields or nearby roads are blocked or unsafe for use efforts of airlift as well as emergency services and relief personnel will be severely hampered. Equipment and supplies will be unable to reach the areas affected by a disaster. This will slow the capability and progress of relief operations, and their ability to supply food and water which can lead to increased suffering and loss of life due to disease and exposure to the elements.

4. Units Impacted.

163 CES March, CA 190 CES Forbes Field, KS 201 RHS Ft Indiantown Gap, PA

5. Contractor. TBD.

6. Contingencies Supported - Previous Usage. Hurricanes Katrina, Rita, and Ike.

7. Cost.

Units Required	Unit Cost	Program Cost
3 Light Equipment To Remove Debris	**$1,500,000**	**$4,500,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

POTABLE WATER PRODUCTION AND STORAGE EQUIPMENT

1. Background. Reverse Osmosis Water Purification Units (ROWPU) and storage bladders will provide water purification and desalination processing at 1500 gallons per hour of potable water. This equipment can be connected to a water treatment plant for city use during a power outage. The requirement provides capability in each Federal Emergency Management Agency (FEMA) region.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference.

3. Impact if Not Funded. Water is always needed after any type of disaster.

4. Units Impacted.

163 CES	March, CA	190 CES	Forbes Field, KS	201 RHS	Ft Indiantown Gap, PA
157 CES	Pease, NH	105 CES	Stewart, NY	203 RHS	Camp Pendleton, VA
145 CES	Charlotte, NC	202 RHS	Camp Blanding, FL	200 RHS	Camp Perry, OH
188 CES	Fort Smith, AR	219 RHS	Malmstrom, MT	254 RHS	Andersen, GU

5. Contractor. TBD.

6. Contingencies Supported - Previous Usage. Tornadoes in Arkansas and Hurricanes Katrina, Rita, and Ike.

7. Cost.

Units Required	Unit Cost	Program Cost
16 1500 GPH ROWPU	**$330,000**	**$5,280,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

EXPLOSIVE ORDNANCE DISPOSAL (EOD) EQUIPMENT

1. Background. There are seventeen (17) Air National Guard EOD units throughout the United States with limited equipment for training and response. Units spend travel dollars to train at Air Force installations due to lack of equipment. Lack of basic Personnel Protective Equipment (PPE) also limits effective response to an EOD incident. Availability of essential equipment will allow units to respond and support major combat, contingency and homeland defense operations. EOD equipment is grouped under the Unit Type Code (UTC) 4F9X4 consisting of a radio package, night vision goggles, communication package, demolition / detection package, self-contained breathing apparatuses, PPE, robots, etc. The requirement provides effective response to situations requiring EOD capability including an ability to respond to hazardous chemical, biological, radiological, nuclear and explosive (CBRNE) incidents throughout the United States and abroad.

2. Requirement Source. Identified by both the 2009 and 2010 ANG Domestic Operations Equipment Requirements (DOERs) Conferences.

3. Impact if Not Funded. Not providing the equipment will prevent the EOD flights from being properly trained and equipped to respond to Hazardous Chemical, Biological, Radiological, and Nuclear (CBRNE) incidents at both home station and abroad.

4. Units Impacted.

104 CES	Barnes, MA	125 CES	Jacksonville, FL	151 CES	Salt Lake City, UT
115 CES	Dane, WI	140 CES	Buckley, CO	155 CES	Lincoln, NE
116 CES	Robins, GA	142 CES	Portland, OR	158 CES	Burlington, VT
119 CES	Hector, ND	144 CES	Fresno, CA	166 CES	New Castle, DE
120 CES	Great Falls, MT	147 CES	Ellington, TX	177 CES	Atlantic City, NJ
123 CES	Standiford, KY	148 CES	Duluth, MN		

5. Contractor. Hendon Company, Deerfield, IL, and Allen Vanguard, Ashburn, VA.

6. Contingencies Supported - Previous Usage. Major National Special Security Events.

7. Cost.

Units Required	Unit Cost	Program Cost
17 EOD Equipment Sets	**$1,500,000**	**$25,500,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

EXPEDIENT FACILITIES

1. Background. During natural or man-made disasters there is always a need for expedient facilities to support contingency responses. Beyond the sheltering capability provided by the ten existing Disaster Relief Beddown Sets (DRBS), additional key facilities needed in contingencies include command and control centers, feeding centers, medical aid, and supply storage for points of distribution, in support of both military and civilian authorities. These facilities need to include electrical generation and distribution including lighting, and basic latrine service. Facilities will also support international relief agencies for disasters outside the United States. Capability is required in each of the 10 Federal Emergency Management Agency (FEMA) regions.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference.

3. Impact if Not Funded. Responding military forces and civilian authorities will lack temporary facilities and will be hindered in coordinating responses, feeding personnel, providing medical, and storing emergency supplies during contingencies and disasters.

4. Units Impacted.

104 CES	Barnes, MA	163 CES	March, CA	201 RHS	Indiantown Gap, PA
141 CES	Fairchild, WA	188 CES	Fort Smith, AR	219 RHS	Malmstrom, MT
145 CES	Charlotte, NC	190 CES	Forbes, KS		
156 CES	Luiz Munoz, PR	200 RHS	Camp Perry, OH		

5. Contractor. TBD.

6. Contingencies Supported - Previous Usage. Capability can provide expedient facilities to support any domestic incident response.

7. Cost.

Units Required	Unit Cost	Program Cost
10 Expedient Facilities Kits	**$1,400,000**	**$14,000,000**

Note: All are 3080 Appropriation (Other Procurement)

Firefighting

Emergency Support Function (ESF #4) - Firefighting detects and suppresses wildland, rural, and urban fires resulting from, or occurring coincidentally with, a major disaster or emergency requiring federal response assistance. ESF #4 manages and coordinates firefighting activities, including the detection and suppression of fires on federal lands, and provides personnel, equipment, and supplies in support of state and local agencies involved in rural and urban firefighting operations.

The management of a large firefighting operation is complex, often involving thousands of personnel and resources from many different agencies and jurisdictions. Fire resulting from, or occurring coincidentally with, a major disaster or emergency may place extraordinary demands on available resources and logistics support systems. A major disaster or emergency may result in many urban, rural, and wildland fires. The damage potential from fires in urban areas during and after a major disaster (such as an earthquake) exceeds that of all other causes. Numerous fires may have the potential to spread rapidly, cause extensive damage, and pose a serious threat to life and property. Urban fire departments not incapacitated by an earthquake may be totally committed to fires in urban areas. Normally available firefighting resources may be difficult to obtain and use because of massive disruption of communication, transportation, utility, and water systems. Agencies will exceed capabilities during a catastrophic event requiring resources from outside departments.

Air National Guard Fire Emergency Services personnel are capable of augmenting local fire fighting resources. The team consists of management, emergency incident commanders and fire fighters. These teams provide fire protection to mitigate the damage from fire (structural and aircraft) that would seriously degrade mission capability; they provide technical rescue to save lives involving confined space, high and low angle, motor vehicle, machinery/equipment, aircraft and trench rescue situations; and they provide hazardous materials response to include Weapons of Mass Destruction (WMD) and Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) events. The Fire Chief / Deputy Fire Chief provides fire protection management of a fire department and provides senior leadership advice on vital information for minimizing loss of life and property damage. The Assistant Fire Chief provides fire fighter supervision and emergency incident scene management and can be expanded to provide fire department training and fire prevention support to include facility inspections, plans reviews and fire prevention education. Finally, fire crews are available to man the apparatus and provide the fire fighting, rescue and hazardous material response.

Firefighting
2010 Domestic Operations Equipment Requirements Conference

Critical Domestic Operations Capabilities List

- P-22 Rescue / Pumper Vehicles
- 4F9FX Firefighting Kit - Provide a Baseline Package to Open a Deployed Fire and Emergency Services Operation
- Interoperable National Incident Management Systems (NIMS)-Compliant Communications with ANG/ARNG and Civilian Agencies
  NOTE: This common critical capability is addressed in ESF #2 - Communications.
- Aircraft Rescue Firefighting Vehicles (P-19R, P-23)
- Personal Protective Equipment for Structural Firefighting

Essential Domestic Operations Capabilities List

- Shelters for Fire Protection, Power Generation, Trucks

FIREFIGHTING
EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

Program	P.E. Number	2012	2013	2014	2015	2016	Total
P-22 Rescue / Pumper	55879F	$11.03	$11.02	-	-	-	$22.05
4F9FX Firefighting Support Kits	55879F	$0.75	$0.75	-	-	-	$1.50
Aircraft Rescue Firefighting Vehicles	55879F	$17.63	$17.62	-	-	-	$35.25
Personal Protective Equipment (PPE) for Structural Firefighting	55879F	$10.00	-	-	-	-	$10.00

Note: All are 3080 Appropriation (Other Procurement)

- P-22 Rescue / Pumper - Utilized to support domestic operations when departments exhaust their resources supporting natural or man-made disasters. These assets are also critical as mutual aid resources for all ANG Fire Emergency Service Flights in day-to-day operations.
- 4F9FX Firefighting Support Kits - Provides the needed baseline equipment to support a Forward Operating Location (FOL) Fire Emergency Services department for structural and Aircraft Rescue Fire Fighting (ARFF). Kits would be strategically located in each FEMA region to allow the ANG to deploy these resources in a timely manner.
- Aircraft Rescue Firefighting Vehicles - Provides P-19R/23 Aircraft Rescue Fire Fighting vehicles to support logistical staging areas for Air Bridge fire protection support.
- Personal Protective Equipment (PPE) for Structural Firefighting - Provides protection to firefighters staffing P-22 Rescue / Pumper vehicles supporting Defense Support of Civil Authorities (DSCA).

INFORMATION PAPER

ON

P-22 RESCUE / PUMPER

1. Background. The P-22 Rescue/Pumper is needed for operational support of Defense Support of Civil Authorities. Disasters such as Hurricane Katrina, the Haiti earthquake, and others have shown a need for support to departments as resources are expended quickly. The Air National Guard (ANG) has the ability to deliver these assets in a timely manner within the hours needed to save lives. Firefighting capability will be increased with procurement of P-22 Rescue/Pumper apparatus postured at ANG locations available to support domestic operations and support Mutual Aid Agreement day to day operations.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference and Hurricane Katrina and the Haiti earthquake lessons learned.

3. Impact If Not Funded. The impact of not funding P-22 Rescue/Pumper could result in potential loss of life in the next earthquake, hurricane, terrorist attack, or other disaster in the United States. These assets will provide a valuable asset to local communities, governors, and the Department of Defense for the purpose of saving lives.

4. Units Impacted. All fifty-nine (59) ANG Fire Emergency Service Flights. Ten (10) units have already been provided the equipment. See the State / FEMA Matrix for projected states to receive the 49 additional vehicles.

5. Contractor. Multiple available.

6. Contingency Supported - Previous Usage. At all local, state, and federal disasters where specialized vehicles are needed.

7. Cost.

Units Required	Unit Cost	Program Cost
49 P-22 Rescue/Pumper	**$450,000**	**$22,050,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

4F9FX FIREFIGHTING SUPPORT KITS

1. Background. The Air National Guard has no 4F9FX Firefighting Support Kits postured to support Forward Operating Locations (FOL) in the event of a natural or man-made disaster. This requirement is for two (2) 4F9FX Firefighting Support Kits per Federal Emergency Management Agency (FEMA) region to provide the ANG with the ability to forward deploy these assets. Support kits include tools and equipment needed for the operation of a fire station in almost any kind of forward deployed situation. Support kit components include portable generators, air compressors, hydraulic rescue tools, hoses, nozzles, ladders, saws, drills, basic emergency medical supplies, etc.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference.

3. Impact If Not Funded. The impact of not funding of 4F9FX Firefighting Support Kits will result in potential loss of life in the next earthquake, hurricane, terrorist attack, or other disaster in the United States.

4. Units Impacted. Capability will be located within each of the ten (10) FEMA Regions. See the State / FEMA Matrix for the specific states.

5. Contractor. Multiple available.

6. Contingency Supported - Previous Usage. At all local, state, and federal disasters where Aircraft Rescue Fire Fighting (ARFF) services are needed.

7. Cost.

Units Required	Unit Cost	Program Cost
20 4F9FX Firefighting Kits	**$75,000**	**$1,500,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

AIRCRAFT RESCUE FIRE FIGHTING VEHICLES

1. Background. The Air National Guard (ANG) lacks reserve Aircraft Rescue Fire Fighting (ARFF) vehicles to support Forward Operating Locations (FOL) in the event of a natural or man-made disaster and a logistical staging area is required. The use of existing vehicles would reduce the level of fire protection at ANG locations with a potential negative impact on mission requirements. Firefighting capability would be increased by posturing P-19R/23 Aircraft Rescue Fire Fighting vehicles to support the potential logistical staging areas for Air Bridge fire protection support. This equipment fills the capability gaps in response to all National Response Framework (NRF) threats and scenarios.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference.

3. Impact If Not Funded. The impact of not funding P-19R/23 ARFF vehicles will result in potential loss of life in the next earthquake, hurricane, terrorist attack, or other disaster in the United States. If this initiative is not funded it would delay appropriate fire protection and negatively affect the logistical staging process. These assets will provide a valuable resource to local communities, governors, and the Department of Defense for the purpose of saving lives.

4. Units Impacted. All ANG forty-seven (47) Fire Departments. See the State / FEMA Matrix for specific states to receive equipment.

5. Contractor. Multiple vendors available.

6. Contingency Supported - Previous Usage. At all local, state, and federal disasters where ARFF services are needed.

7. Cost.

Units Required	Unit Cost	Program Cost
47 P-19R/23 Aircraft Rescue Fire Fighting Vehicles	**$750,000**	**$35,250,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

PERSONAL PROTECTIVE EQUIPMENT (PPE) FOR STRUCTURAL FIREFIGHTING

1. Background. Air National Guard (ANG) Fire Emergency Services primary mission is Aircraft Rescue Fire Fighting (ARRF) on airfields and in proximity of the installation. The PPE used is not compatible with civilian fire departments. Structural PPE would provide ANG firefighters the needed protection to support domestic operations in the event of natural or man-made disasters. Structural PPE for all ANG firefighters in support of Defense Support of Civil Authorities (DSCA) would fill capability shortfalls in response to National Response Framework (NRF) threats and scenarios.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference.

3. Impact If Not Funded. Firefighters will not be optimally equipped for structural firefighting. Without the structural PPE, firefighters would work harder with less heat release increasing the chance of heat stress and decreasing efficiency.

4. Units Impacted. All fifty-nine (59) ANG Fire Emergency Service Flights. See the State / FEMA Matrix for specific states to receive equipment.

5. Contractor. Multiple vendors available.

6. Contingency Supported - Previous Usage. At all local, state, and federal disasters where ARFF services are needed.

7. Cost.

Units Required	Unit Cost	Program Cost
4000 Structural Personal Protective Equipment Sets	**$2,500**	**$10,000,000**

Note: All are 3080 Appropriation (Other Procurement)

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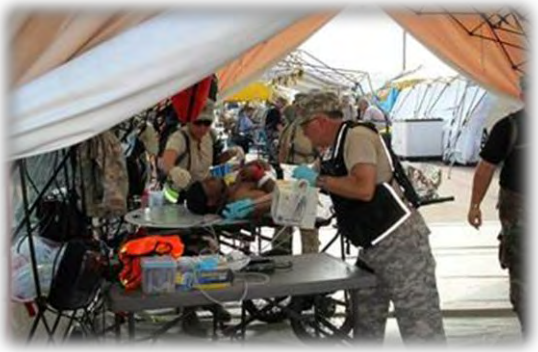
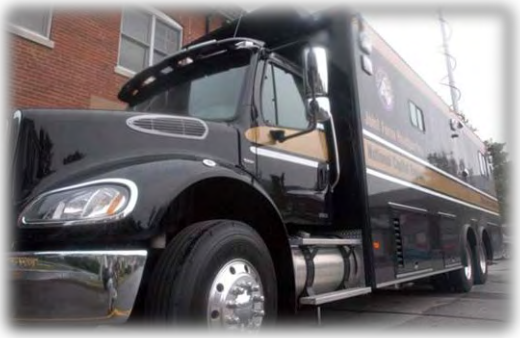
Emergency Management

Emergency Management (ESF #5) - Emergency Management is responsible for supporting overall activities of the Federal Government for domestic incident management. ESF #5 provides the core management and administrative functions in support of FEMA's National Response Coordination Center (NRCC), Regional Response Coordination Center (RRCC), and Joint Field Office (JFO) operations.



ESF #5 serves as the support ESF for all federal departments and agencies across the spectrum of domestic incident management from prevention to response and recovery. ESF #5 facilitates information flow in the pre-incident prevention phase in order to place assets on alert or pre-position for quick response. During the post-incident response phase, ESF #5 transitions and is responsible for support and planning functions. ESF #5 activities include those functions that are critical to support and facilitate multiagency planning and coordination for operations involving potential and actual Incidents of National Significance. This includes alert and notification, deployment and staffing of Department of Homeland Security (DHS) emergency response teams, incident action planning, coordination of operations, logistics and material, direction and control, information management, facilitation of requests for federal assistance, resource acquisition and management (to include allocation and tracking), worker safety and health, facilities management, financial management, and other support as required.



The Air National Guard brings with it a natural organizational hierarchy which translates effectively and efficiently into the National Incident Management System (NIMS) organization. The combination of these categories of command, control, and communications, produces the capabilities required to maximize the Common Operating Picture (COP) within local communities, states and to all appropriate ESF agencies. The equipment allowing maximum COP (e.g., Mobile Emergency Operations Centers, Liaison Officer Tool Kits, All-Source COP) also provides connectivity between the Incident Command System (ICS), which commands disaster operations in local communities, and the National Guard or other federal agencies as required.

Emergency Management
2010 Domestic Operations Equipment Requirements Conference

Critical Domestic Operations Capabilities List

- Mobile Emergency Operations Center (FEMA Type II)
- Liaison Officer Tool Kit (Cell Phone, Air Card, Laptop, SATCOM)
- Common Operational Picture (COP) - All-Source Information Fusion, Analysis, and Dissemination
- Access to Local / State Emergency Operations Centers (EOCs) to Non-Government Internet
  NOTE: This common critical capability is addressed in ESF #2 - Communications.
- Biological Agent Detection Monitoring

Essential Domestic Operations Capabilities List

- Vehicle Mounted Public Address Systems
- VTC Connectivity to Other Participants in the Operation
- Transportation to Incident Sites, Locations Where Services Would be Needed
- Radiation Badges
- Radiological Assessment will be Needed to Validate the More Limited and Preliminary Detection Efforts and Support Management Planning

EMERGENCY MANAGEMENT EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

Program	P.E. Number	2012	2013	2014	2015	2016	Total
Mobile Emergency Operations Center (MEOC)	55165F	$9.21	$9.21	$9.20	$9.20	$9.20	$36.82
Liaison Command and Control Kit	55165F	$0.86	$0.85	-	-	-	$1.71
Common Operating Picture (COP)	55165F	$1.00	$1.00	$1.00	$1.00	-	$4.00
Biological Agent Detection	55165F	$1.68	$1.67	-	-	-	$3.35

Note: All are 3080 Appropriation (Other Procurement)

- Mobile Emergency Operations Center (MEOC) - Will deploy during disaster relief operations and large scale installation emergencies to provide interagency / interoperable command and control with integration of FEMA Type II requirements including full spectrum voice, data and imagery.
- Liaison Command and Control Kit - Provides advanced agile, field expedient, mobile communications to support Incident Command and first responders in joint interagency response.
- Common Operating Picture (COP) - Will provide fusion of multiple data sources across the air, ground and maritime domain incorporating geospatial information, command and control and plume modeling to provide leadership with real-time situational awareness.
- Biological Agent Detection - Required by sixty-seven (67) ANG Emergency Management Flights to respond to biological incidents throughout the United States and abroad.

INFORMATION PAPER

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MOBILE EMERGENCY OPERATIONS CENTERS (MEOC)

1. Background. Homeland Security Presidential Directive (HSPD) 5 directs military, state and federal government response agencies to meet communications interoperability requirements. Published guidance mandates that commanders will provide command and control capabilities to support a Common Operating Picture (COP) for accountability and decision support to fulfill Air Force Incident Management System (AFIMS) requirements. Currently, Air National Guard (ANG) Emergency Management possesses limited capability to provide agile Command and Control (C2) or interoperability to responders. Federal Emergency Management Agency (FEMA) Type II requirements provide full spectrum of voice, data and imaging compatible with local emergency responder capabilities to support mutual aid agreements and interoperability requirements.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference.

3. Impact If Not Funded. Current capability limitations could create life safety issues for ANG personnel, local responders and affected populations. The ANG enterprise would not be in compliance with HSPD 5 & 8 mandated standards.

4. Units Impacted. All fifty-four (54) states, territories and the District of Columbia possessing tasked units (1 per state, territory and the District of Columbia).

5. Contractor. Visual Innovations Company, Inc., Austin, TX.

6. Contingency Supported - Previous Usage. Homeland Defense Operations / Domestic Operations and Response. National Guard Support to Civil Authorities (NGSCA) Title 32 and NORTHCOM Title 10 missions included. Emergency Management Assistance Compacts.

7. Cost.

Units Required	Unit Cost	Program Cost
25 Self Propelled MEOC	**$800,000**	**$20,000,000**
29 Trailer Mounted MEOC	**$580,000**	**$16,820,000**
Total		**$36,820,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

LIAISON COMMAND AND CONTROL KIT

1. Background. The 2010 Domestic Operations Essential Requirements Conference indentified the need for interoperable, portable, and agile command and control including the following capabilities: ruggedized computer, printer, copier, scanner, air card, Inmarsat mobile satellite communications, webcam, digital video and an interoperability module. This system will provide agile support to Incident Commanders, liaison NCOs / officers, field responders and those requiring situational awareness. Current equipment does not support joint or interagency operations. The requirement supports an advanced agile, field expedient, man portable, mobile communications suite for each Air National Guard (ANG) unit Designed Operational Capability (DOC) tasked with the 4F9WM Unit Type Code (UTC).

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference.

3. Impact If Not Funded. Current lack of capability will decrease situational awareness and degrade Command and Control during a disaster or man-made event. ANG Emergency Management enterprise responses will be in abeyance of Homeland Security Presidential Directive 5 & 8.

4. Units Impacted. All sixty-seven (67) 4F9WM DOC tasked units. Ten (10) units are funded and will be procured late in 2010 / early 2011.

5. Contractor. 308 Systems, Ft. Collins, CO.

6. Contingency Supported - Previous Usage. National Guard Support to Civil Authorities (NGSCA) Title 32, NORTHCOM Title 10 missions - To include all hazards response Emergency Management Assistance Compacts (EMAC).

7. Cost.

Units Required	Unit Cost	Program Cost
57 Liaison Command and Control Kits	**$30,000**	**$1,710,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

COMMON OPERATING PICTURE (COP)

1. Background. Enhancing combat and domestic operations capability of National Guard Command and Control (C2) requires integration of multiple data systems. The COP must be able to fuse data across the ground, air and sea domains incorporating Geospatial Information System (GIS), C2, and plume modeling. This capability provides state and unit leadership immediate access to their status of forces and the ability to quickly assess critical information resulting in timely dissemination to mission partners and effective employment of forces for domestic operations. State and unit leadership must be able to develop and maintain overall awareness and understanding of an incident across jurisdictions while preparing for potential requirements and requests for additional support. They must possess the ability to formulate, execute and communicate operations decisions at an incident site, as well as between incident management entities across the jurisdiction and functional agencies. This requirement provides a COP suite for each state and territory's Joint Operations Center (JOC), ANG flying wing, Western and Eastern Air Defense Sectors (WADS & EADS) and the 601st Air Operations Center (AOC).

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference and lessons learned from Hurricanes Katrina, Ike and Gustav.

3. Impact If Not Funded. Failure to develop and field COP suite will deny state and installation leadership the ability to maintain and disseminate time critical incident situational awareness to fully integrate with mission partners.

4. Units Impacted. All ANG units, state JOCs, WADS, EADS and 601st AOC.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. Operation NOBLE EAGLE, Air Sovereignty Alert (ASA) Missions, tanker wings supporting ASA missions, Hurricanes Katrina, Ike and Gustav.

7. Cost.

Units Required	Unit Cost	Program Cost
146 COP Units	**$27,397**	**$3,999,962**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

BIOLOGICAL AGENT DETECTION

1. Background. The procurement of a robust field-ready biological agent detection capability will enhance the detection capability of Air National Guard (ANG) Emergency Management Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) response teams. The currently fielded Hand Held Assay (HHA) only provides presumptive results requiring additional Gold Star Laboratory testing and confirmation. The HHA is subject to numerous false positive indications thus requiring multiple tests for initial presumptive positive. During CBRNE response operations involving suspect biological incident results, determination of treatment protocol and preventative prophylaxis treatments are delayed due to inability of ANG Emergency Management personnel to quickly confirm presence of a biological agent. The requirement provides advanced Biological Detection capability at each unit Designed Operational Capability (DOC) tasked with the 4F9WM Unit Type Code (UTC).

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference.

3. Impact If Not Funded. Current technology limitations could create life safety issues for ANG personnel.

4. Units Impacted. All sixty-seven (67) 4F9WM DOC tasked units.

5. Contractor. Idaho Technologies and Response Biomedical Corps, Boise, ID.

6. Contingency Supported - Previous Usage. Domestic CBRNE response actions and overseas contingency operations.

7. Cost.

Units Required	Unit Cost	Program Cost
67 Advanced Biological Detection	**$50,000**	**$3,350,000**

Note: All are 3080 Appropriation (Other Procurement)

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Mass Care, Emergency Assistance, Housing, and Human Services

Mass Care, Emergency Assistance, Housing, and Human Services (ESF #6) - Coordinates federal assistance in support of state and local efforts to meet the mass care needs of victims of a disaster. This federal assistance will support the delivery of mass care services of shelter, feeding, and emergency first aid to disaster victims; the establishment of systems to provide bulk distribution of emergency relief supplies to disaster victims; and the collection of information to operate a disaster welfare information system to report victim status and assist in family reunification.

The magnitude of damage to structures and lifelines will rapidly overwhelm the capacity of state and local governments to assess the disaster and respond effectively to basic and emergency human needs. Damage to roads, airports, communications systems, etc., will hamper emergency response efforts. The movement of emergency supplies will be seriously impeded. Many professional emergency workers and others who normally would help during a disaster will be dead, injured, involved with family issues resulting from the disaster, or unable to reach their assigned posts. State, county, and municipal emergency facilities will be severely damaged or inaccessible. Hundreds of thousands of disaster victims will be forced from their homes, depending on such factors as time of occurrence, area demographics, building construction, and existing weather conditions. There will be large numbers of casualties which may leave a large population without support.

Air National Guard resources are able to coordinate the delivery of federal mass care, emergency assistance, housing, and human services when local, tribal and state response and recovery needs exceed their capabilities.

Mass Care, Emergency Assistance, Housing, and Human Services 2010 Domestic Operations Equipment Requirements Conference

Critical Domestic Operations Capabilities List

- Recovery and Temporary Storage of Human Remains
- Ability to Feed Using Local Rations with Existing ANG Equipment
- Adequate Bed-down Capability to Support Deployed Guardsmen in Support of Civil Authorities

MASS CARE, EMERGENCY ASSISTANCE, HOUSING, AND HUMAN SERVICES EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

Program	P.E. Number	2012	2013	2014	2015	2016	Total
Fatality Search and Recovery Teams (FSRTs) Temporary Storage Trailers for Human Remains	59297F	$2.70	-	-	-	-	$2.70
Mass Care, Emergency Assistance Equipment	59297F	$4.00	$3.60	-	-	-	$7.60
Disaster Relief Beddown Sets (DRBS)	59297F	$11.00	$11.00	-	-	-	$22.00

Note: All are 3080 Appropriation (Other Procurement)

- Fatality Search and Recovery Teams (FSRTs) Temporary Storage Trailers for Human Remains - May be activated either independently, or as an element of the Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Emergency Response Force Package (CERFP) to assist with mass fatalities management. CERFP incident site fatality management includes the search, documentation, recovery, collection, temporary staging, and transport of fatalities to designated collection points.
- Mass Care, Emergency Assistance Equipment - Single Pallet Expeditionary Kitchen (SPEK) is a lightweight, quick response, deployable feeding platform designed to provide hot meals that can be used in support of Homeland Defense / Civil Support. The Air National Guard currently has 95 complete SPEKs. The SPEK can feed approximately 550 people per hour using Unitized Group Rations and high-efficiency burner technology.
- Disaster Relief Beddown Sets (DRBS) - Unit Type Codes 4F9L1-4F9L6 - Provides billeting and support for 150 personnel, and are rapidly deployable, sustainable and expandable. The kits are modular and provide basic housing, latrine, and shower facilities. DRBS can be erected with several options. Support includes billeting for 10 persons per shelter and includes cots with insect bars and environmental controls, a field lavatory system, shower and shaving system, low voltage electrical generation and distribution system, limited encampment lighting, and water distribution system.

INFORMATION PAPER

ON

FATALITY SEARCH AND RECOVERY TEAMS (FSRTs)
TEMPORARY STORAGE TRAILERS FOR HUMAN REMAINS

1. Background. Fatality Search and Recovery Teams may be activated either independently, or as an element of the Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Emergency Response Force Package (CERFP) to assist with mass fatalities management. CERFP incident site fatality management includes the search, documentation, recovery, collection, temporary staging, and transport of fatalities to designated collection points. Per Joint Publication 4-06, *Mortuary Affairs in Joint Operations,* human remains should be refrigerated to slow decomposition. Contaminated human remains should also be temporarily stored to avoid spread of contamination. The Air National Guard (ANG) needs the capability to initially store remains until they are transferred to the local government. The storage trailer can be used to temporarily store human remains for an indefinite period of time and for the transportation of environmentally sensitive equipment. When not storing remains, the trailers can also serve as a reconstitution area or command and control center for FSRT members.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference. The need for temporary storage of human remains is a key lesson learned during the response to Hurricane Katrina and Operation UNIFIED RESPONSE (OUR) in Haiti. OUR proved that not having the capability to store human remains can be disastrous for the local medical coroners and ultimately for the families of the victims recovered.

3. Impact If Not Funded. FSRTs are limited in their ability to temporarily store contaminated human remains in the event of a CBRNE incident. The ANG currently relies on the local economy to provide storage or in severe cases to temporarily inter human remains. Failure to procure these individual equipment items significantly degrades mission effectiveness, hinders the ability to properly identify remains, and increases the vulnerability of the recovery personnel. This equipment wills increase the productivity and enhance FRST safety.

4. Units Impacted. Shortfalls impact all FSRTs that report in every Federal Emergency Management Agency region.

5. Contractor. Hazmat Medical Associates, Mokena, IL.

6. Contingency Supported - Previous Usage: Hurricane Katrina, OUR in Haiti.

7. Cost.

Units Required	Unit Cost	Program Cost
54 Recovery and Temporary Storage for Human Remains	**$50,000**	**$2,700,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

MASS CARE, EMERGENCY ASSISTANCE EQUIPMENT

1. Background. The Single Pallet Expeditionary Kitchen (SPEK) is a lightweight, quick response, deployable feeding platform designed to provide hot meals that can be used in support of Homeland Defense / Civil Support. The Air National Guard (ANG) currently has 95 complete SPEKs. The SPEK can feed approximately 550 people per hour using Unitized Group Rations (UGRs) and high-efficiency burner technology. Expanding the existing SPEK platform will enhance feeding capability by allowing use of fresh, locally procured food sources. A team of six (6) ANG Services personnel can ready the platform and start feeding within four hours of arrival of equipment and rations. During the Presidential Inauguration of 2009, UGRs were served to 10,000 troops causing a UGR shortage in the supply system. Operation UNIFIED RESPONSE in Haiti proved that airlift is limited and UGR rations could not be transported. The second pallet of SPEK equipment would reduce airlift requirements by decreasing the need to transport UGRs.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference. Lessons learned from domestic operations including Hurricane Katrina, 2009 Presidential Inauguration and Exercise GLOBAL PATRIOT revealed the need for a second pallet of equipment to augment the current SPEK capability.

3. Impact If Not Funded. Failure to procure this equipment significantly reduces feeding capability and requires significant airlift to transport UGRs. The acquisition of this equipment increases the modularity and feeding capability of the SPEKs. Mass field feeding platforms could provide crucial subsistence to displaced populations.

4. Units Impacted. Shortfalls impact all ninety-five (95) Force Support Sustainment Forces that report to the fifty-four (54) states, territories, and the District of Columbia.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage: Hurricane Katrina, Exercise GLOBAL PATRIOT, and Operation UNIFIED RESPONSE (Haiti).

7. Cost.

Units Required	Unit Cost	Program Cost
95 Equipment Packages	**$80,000**	**$7,600,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

DISASTER RELIEF BEDDOWN SETS (DRBS)

1. Background. Disaster Relief Beddown Sets (DRBS), Unit Type Codes (UTCs) 4F9L1 – 4F9L6, provide billeting and support for 150 personnel, and are rapidly deployable, sustainable and expandable. The kits are modular and provide basic housing, latrine, and shower facilities. DRBS can be erected with several options. Support includes billeting for 10 persons per shelter and includes cots with insect bars and environmental controls, a field lavatory system, shower and shaving system, low voltage electrical generation and distribution system, limited encampment lighting, and water distribution system. One 10,000 lb All-Terrain forklift to offload and position assets is included. The Air National Guard (ANG) has ten (10) kits at different locations. Ten additional sets will ensure two DRBS are located in each Federal Emergency Management Agency (FEMA) region and allow use of DRBS at multiple locations. Additional sets will also provide the capability for contingency troop beddown and support of international relief agencies during natural disasters outside the United States.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference.

3. Impact if Not Funded. Response forces and displaced persons will lack housing facilities during contingencies and disasters. Only six FEMA regions will have dedicated DRBS capability which meets only 60% of required Chemical Biological Radiological Nuclear Explosive Enhanced Response Force Package and Homeland Response Force capability needs in each FEMA region.

4. Units Impacted.

105 CES	Stewart, NY	188 CES	Fort Smith, AR	219 RHS	Malmstrom, MT
141 CES	Fairchild, WA	190 CES	Forbes, KS		
157 CES	Pease, NH	200 RHS	Camp Perry, OH		

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. The ANG Crisis Action Team was tasked to provide DRBS capability for earthquake recovery operations in Haiti (January 2010).

7. Cost.

Units Required	Unit Cost	Program Cost
10 Disaster Relief Beddown Sets	**$2,200,000**	**$22,000,000**

Note: All are 3080 Appropriation (Other Procurement)

Public Health and Medical Service

Public Health, Medical, Mental Health Services, and Mass Fatality Management (ESF #8) - Provides coordinated federal assistance to supplement state and local resources in response to public health and medical care needs following a major disaster or emergency, or during a developing potential medical situation. Assistance provided under ESF #8 is directed by the Department of Health and Human Services (HHS) through its executive agent, the Assistant Secretary for Public Health Emergency Preparedness (ASPHEP). Resources will be furnished when state and local resources are overwhelmed and public health and medical assistance is requested from the federal government.

A significant natural disaster or manmade event that overwhelms the affected state would necessitate federal public health and medical care assistance. Hospitals, nursing homes, ambulatory care centers, pharmacies, and other facilities for medical/healthcare and special needs populations may be severely damaged structurally or destroyed. Facilities that survive with little or no structural damage may be rendered unusable or only partially usable because of a lack of utilities (power, water, sewer) or staff are unable to report for duty as a result of personal injuries and/or damage/disruption of communications and transportation systems. Medical and healthcare facilities that remain in operation and have the necessary utilities and staff will probably be overwhelmed by the "walking wounded" and seriously injured victims who are transported there in the immediate aftermath of the occurrence. In the face of massive increases in demand and the damage sustained, medical supplies (including pharmaceuticals) and equipment will probably be in short supply. (Most healthcare facilities usually maintain only a small inventory stock to meet their short term, normal patient load needs.) Disruptions in local communications and transportation systems could also prevent timely resupply.

Medical performs, provides, or arranges to promote, improve, conserve, or restore the mental or physical well-being of personnel. The ESF #8 services include the management of health services resources such as manpower and facilities; preventive and curative health measures; evacuation of the wounded or sick; selection of the medically fit and disposition of the medically unfit; blood management; medical supply, equipment, and maintenance; stress control; and medical, dental, veterinary, laboratory, optometric, nutrition therapy, and medical intelligence services. Attributes include Civilian Emergency Medical System support during mass casualty operations; Crisis Intervention Stress Management (CISM) in coordination with Religious Support Teams; Public Health System support in the distribution and administration of vaccines and antidotes to the public; State Emergency Medical Response Plan implementation assistance; critical force health protection; and mortuary support.

Public Health and Medical Services
2010 Domestic Operations Equipment Requirements Conference

Critical Domestic Operations Capabilities List

- Early Response Capability (Golden Hour - Emergency Treatment & Triage) to Domestic Mass Casualty Event
- Modernization of Existing Expeditionary Medical Support (EMEDS) Medical Assemblages
- Equipment to Manage Mass Fatalities (Storage and Recovery)
- Interoperable National Incident Management Systems (NIMS)-Compliant Communications with ANG / ARNG and Civilian Agencies

PUBLIC HEALTH AND MEDICAL SERVICES EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

Program	P.E. Number	2012	2013	2014	2015	2016	Total
Early Response Capability (Golden Hour – Emergency Treatment & Triage) to Domestic Mass Casualty Event	58221F	$0.28	$1.20	$1.20	$1.20	$1.10	$4.98
Modernization of Existing Expeditionary Medical Support (EMEDS) Medical Assemblages	58221F	$15.13	-	-	-	-	$15.13
Fatality Search and Recovery Team (FSRT) Equipment	59297F	$14.67	$1.83	-	-	-	$16.50
Interoperable Communications Suite	58221F	$0.09	$0.09	$0.09	-	-	$0.27

Note: All are 3080 Appropriation (Other Procurement)

- Early Response Capability (Golden Hour - Emergency Treatment & Triage) to Domestic Mass Casualty Event - The equipment package expands MDG capabilities across the country to be self-sufficient in food, shelter and water for three days as well as the ability to provide immediate triage and lifesaving medical care.
- Modernization of Existing Expeditionary Medical Support (EMEDS) Medical Assemblages - By FY10, a total of 6 EMEDS+25s and 3 EMEDS+10s require upgrading to the Block 12 allowance standards. There are seventeen (17) National Guard Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) Enhanced Response Force Package (NG CERFP) teams that require modernization to the new allowance standard in order to maintain continuity with the 10 new Homeland Response Force (HRF) missions.
- Fatality Search and Recovery Team (FSRT) Equipment - All FSRTs existing and new require essential fatality management equipment packages consisting of Personal Protective Equipment (PPE), vehicles, trailers, shelters, training tools, hospital litters, etc.
- Interoperable Communications Suite - Provides the required connectivity to communicate with outside agencies increasing effectiveness of medical response.

INFORMATION PAPER

ON

EARLY RESPONSE CAPABILITY (GOLDEN HOUR - EMERGENCY TREATMENT & TRIAGE) TO DOMESTIC MASS CASUALTY EVENT

1. Background. There is a public expectation that local, state, and federal authorities will respond with haste and efficiency to treat injuries resulting from a domestic mass casualty event. Air National Guard (ANG) Medical Groups (MDGs) are perfectly positioned to provide short notice, effective response to a broad spectrum of disaster scenarios. Unfortunately most MDGs do not possess the equipment necessary to respond to no-notice events as a self-sufficient, scalable, and flexible force package in support of civil authorities. The fundamental requirements to bridge the current capability gap in the ANG medical response to a major domestic incident are timeliness of the response and self-sufficiency of the force package. A backpack-restricted equipment footprint would allow maximum transportation flexibility and ensure maximum speed of deployment. The equipment package listed expands MDG capabilities allowing them to be self-sufficient in food, shelter and water for three days and provide immediate triage and lifesaving medical care. This capability would give disaster planners the ability to significantly expand the scalability and flexibility of ANG medical response during a major disaster event. The backpack footprint allows all MDGs to be relevant as a medical rapid response force package.

2. Requirements Source. 2010 Domestic Operations Equipment Requirements Conference. Lessons learned from major mass casualty incidents such as the Haiti earthquake.

3. Impact If Not Funded. A valuable core capability of ANG MDGs would not be available to save the lives and mitigate suffering of disaster victims.

4. Units Impacted. All ANG MDGs.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage. New capability that fills critical gap in ANG medical response. Supports any major homeland incident.

7. Cost.

Units Required	Unit Cost	Program Cost
89 Med Rapid Response Equip Packages	**$56,000**	**$4,984,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

MODERNIZATION OF EXISTING EXPEDITIONARY MEDICAL SUPPORT (EMEDS) MEDICAL ASSEMBLAGES

1. Background. A total of six (6) EMEDS+25s and three (3) EMEDS+10s require upgrading to the Block 12 allowance standards. Additionally, there are 17 National Guard Chemical, Biological, Radiological, Nuclear, and Explosives (CBRNE) Enhanced Response Force Package (NG CERFP) teams that require modernization to the new allowance standard in order to maintain continuity with the ten (10) new Homeland Response Force (HRF) missions. Chief, National Guard Bureau selected EMEDS as the Medical Element in support of Homeland Defense. The Secretary of Defense supports the National Guard Bureau Homeland Security posture statement for the NG CERFP/HRF.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference. Lessons learned from Hurricanes Katrina, Ike, Gustav and the Greensburg, Kansas tornado.

3. Impact If Not Funded. ANG Medical Service personnel will not be able to rapidly respond to domestic incidents resulting in potential ANG mission failure and loss of life.

4. Units Impacted. Twenty-eight states including the 190th MDG, Topeka, KS; 111th MDG, Willow Grove, PA; and 141st MDG, Fairchild AFB, WA. These three Consolidated Storage and Deployment Centers provide support to 17 CERFP states, 10 HRF states, 89 Medical Groups and 10 Aeromedical Evacuation units. See State / FEMA Matrix for state locations.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage: Hurricanes Katrina, Ike, Gustav, Democratic and Republican National Conventions, Olympics, Super Bowl, and Greensburg, Kansas tornado.

7. Cost.

Units Required	Unit Cost	Program Cost
9 EMEDS	**$903,849**	**$8,134,641**
6 EMEDS+25	**$250,251**	**$1,501,506**
3 Oxygen Solution	**$113,081**	**$339,243**
3 Water Dist	**$28,582**	**$85,746**
3 EMEDS PEDS/GERIATRICS/HRT	**$132,084**	**$396,252**
6 Air Transportable Clinics (ATCs)	**$37,452**	**$224,712**
3 CP EMEDS	**$121,074**	**$363,222**
17 NG CERFP/HRF	**$240,000**	**$4,080,000**
Total		**$15,125,322**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

FATALITY SEARCH AND RECOVERY TEAM (FSRT) EQUIPMENT

1. Background. Reports following September 11th, Hurricane Katrina and the Haiti earthquake identified fatality management as a critical mission set. The Mortuary Affairs (MA) requirement is identified in JP 3-41, *Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives Consequence Management,* and JP 3-40, *Combating Weapons of Mass Destruction*. Emergency Support Function (ESF #8) identifies the Department of Health and Human Services (DHHS) as the primary for MA. JP 3-27, *Homeland Defense*, states DoD should be prepared to support "DHHS with mass fatality management." JP 3-28, *Civil Support*, states that "Military MA units can be deployed in order to search, recover, transport, and temporarily store remains in support of civil authorities. Few of these units are available in the force structure." MA units provide assistance to the DHHS's Disaster Mortuary Operational Response Teams (DMORTs) which are not manned for this mission. The AF, led by the ANG, established eleven (11) member Fatality Search & Recovery Teams (FSRTs) that may be activated independently or as an element of the Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) Emergency Response Force Package (CERFP). There currently is no identified institutional funding for FSRTs. All FSRTs require essential fatality management equipment packages consisting of Personal Protection Equipment (PPE), vehicles, shelters, training tools, hospital litters, etc., requiring frequent reconstitution due to required annual training.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference.

3. Impact If Not Funded. Fatality management is significant because the way victims are treated has long-lasting effects on the mental health of survivors and communities. Correct identification of the dead has legal significance that can impact families and relatives for many years after a disaster. Early opportunities to identify remains may be lost as the bodies decompose and contamination in the form of disease and possible drinking water contamination poses a serious threat to recovery workers. Due to lack of equipment, FSRTs are limited in their ability to recover and preserve evidence aiding identification of human remains.

4. Units Impacted. All fifty-four (54) states, territories, and the District of Columbia are supported by all CERFP and Homeland Response Force locations. See the State/FEMA Matrix.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage: Hurricane Katrina, GLOBAL PATRIOT, Presidential Inauguration, 2010 G20 Summit, NYC Regional Mass Fatality Evolution, and Operation UNIFIED RESPONSE.

7. Cost.

Units Required	Unit Cost	Program Cost
27 FSRT Equipment Packages	**$611,000**	**$16,497,000**

Note: All are 3080 Appropriation (Other Procurement)

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INTEROPERABLE COMMUNICATIONS SUITE

1. Background. The Expeditionary Medical Support (EMEDS) is the medical response system used by the Air National Guard in disasters and contingencies. The EMEDS does not have the capability to communicate externally to multiple outside Command and Control (C2) agencies, medical responders and the Centers for Disease Control with their existing communication package. There is a need for a portable and mobile communication package to communicate via data and voice. The medical teams must input, document, track and report all patient encounters, epidemiological data and trends, environmental health site assessments and potential/actual occupational exposures. Notebook computers with CD/DVD drives, data/fax modems and printers are essential tools for reference sources, disease surveillance, hazard surveillance documentation and dissemination of soft and hard copy reports. Ethernet cards will provide real-time reporting to higher staff agencies via satellite communications.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference. Lessons learned from Hurricanes Katrina, Rita, and Ike.

3. Impact If Not Funded. Will not have the connectivity required to communicate with outsides agencies decreasing effectiveness of medical response.

4. Units Impacted. Three (3) Consolidated Storage and Deployment Center's (CSDCs) supporting twenty-seven (27) CERFP/HRF units:
111 MDG Willow Grove, PA 141 MDG Fairchild AFB, WA 190 MDG Topeka, KS

5. Contractor. N/A

6. Contingency Supported - Previous Usage: Hurricane Katrina, Democratic and Republican National Conventions, Olympics, Super Bowl, and the Greensburg, Kansas tornado.

7. Cost.

Units Required	Unit Cost	Program Cost
9 Mobile Communication Suites	**$30,000**	**$270,000**

Note: All are 3080 Appropriation (Other Procurement)

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Search and Rescue

Emergency Support Function (ESF #9) - Search and Rescue rapidly deploys components of the National Urban Search and Rescue (USAR) Response System to provide specialized lifesaving assistance to state and local authorities in the event of a major disaster or emergency. USAR operational activities include locating, extricating, and providing on-site medical treatment to victims trapped in collapsed structures. The Department of Homeland Security (DHS), as primary agency for ESF #9, will activate the national USAR Response System for any incident or anticipated incident that is determined likely to result in collapsed structures that would overwhelm existing state and local USAR resources. The likelihood of activation depends on the nature and magnitude of the event, the suddenness of onset, and the existence of USAR resources in the affected area.

Disasters and emergencies vary widely in scope, degree of devastation, and threat to human life. For example, in situations that entail structural collapse, large numbers of people may require rescue and medical care. The mortality rate among trapped victims rises dramatically after 72 hours; thus USAR must be initiated without delay. During the response, rescue personnel may encounter extensive damage to the local infrastructure, such as buildings, roadways, public works, communications, and utilities. Such damage can create environmental safety and health hazards, such as downed power lines, unsafe drinking water, and unrefrigerated food. Following an earthquake, aftershocks, secondary events, and/or other hazards (e.g. fires, tsunami, landslides, flooding, and hazardous materials releases) may compound problems and threaten both disaster victims and rescue personnel, and in some circumstances, rescue personnel may be at risk from terrorism, civil disorder, or crime.

Search and Rescue
2010 Domestic Operations Equipment Requirements Conference

Critical Domestic Operations Capabilities List

- Urban Search and Rescue (USAR) Capability Required Within Hours of an Incident
- Dedicated Vehicles to Transport USAR Team Members and Equipment
- USAR Requires Assured Communication National Incident Management System (NIMS)-Compliant Among Team Members, Between Team Members and the State Joint Operations Center (JOC) and Between Team Members and Civil Authorities to Include the Emergency Operations Center (EOC)
  NOTE: This common critical capability is addressed in ESF #2 - Communications.

Essential Domestic Operations Capabilities List

- Personal Flotation Devices for USAR Personnel
- Emergency Medical Service Equipment Required for Triage and Emergent Treatment

SEARCH AND RESCUE EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

Program	P.E. Number	2012	2013	2014	2015	2016	Total
Urban Search and Rescue Equipment Kits	55879F	$11.00	$11.00	-	-	-	$22.00
Urban Search and Rescue Dedicated Vehicles	59297F	$1.60	$1.60	-	-	-	$3.20

Note: All are 3080 Appropriation (Other Procurement)

- Urban Search and Rescue (USAR) Equipment Kits - Performs duties as the initial response asset during the critical phase between incident occurrence and FEMA USAR team's arrival. FEMA USAR teams are not first responders by definition. Initial duties of a USAR team include search and rescue of trapped persons and initial basic medical treatment. Additional duties include communication established between on scene teams and local, state, and federal Joint Operations Center (JOC) and Emergency Operations Center (EOC). Teams would be equipped and trained to rescue trapped persons from structural collapse, water, confined space, trench, and high angle environments.
- Urban Search and Rescue Dedicated Vehicle - Six passenger, short bed, crew cab pickup trucks that would allow USAR teams to quickly respond to any domestic incident. Vehicles would carry all equipment, including specialized rescue equipment, necessary for 72 hours of self-sustained operations.

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ON

URBAN SEARCH AND RESCUE EQUIPMENT KITS

1. Background. The need for rapid deployable, self-sustained Urban Search and Rescue (USAR) teams has become evident after multiple natural and manmade disasters in the United States. Disasters such as Hurricane Katrina, Haiti earthquake, and others have shown a need for rapid response by trained and equipped responders to save lives. The Federal Emergency Management Agency (FEMA) statistics show that a person trapped has a 90% survival rate. At one (1) day the survival rate is 80% and the survival rate at two (2) days falls to 37%. Air National Guard (ANG) Fire Protection already has teams partially trained and available for short notice deployment. The ANG has the ability to deliver these teams in a timely manner to save lives. To become a functioning ANG USAR team there is a need to obtain additional training to meet FEMA requirements. There is also a need for specialized equipment to make the teams self-sufficient for 72 hours and perform specialized rescues in confined space, collapsed structures, high angle, water, and trench rescue. The team also needs communication capabilities to report back to state and federal Joint Operations Centers (JOCs) to provide situational updates for decision making to be more effective.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference.

3. Impact If Not Funded. The impact of not funding of ANG USAR teams will result in potential loss of life in the next earthquake, hurricane, terrorist attack, or other disasters (e.g. wild-land search, cave search and water rescues excluding dive rescue) in the United States. These teams provide a valuable asset to local communities, state governors, and the Department of Defense for the purpose of saving lives.

4. Units Impacted. Capability will be located within each of the 10 FEMA Regions. See the State / FEMA Matrix for the specific states.

5. Contractor. Multiple available.

6. Contingency Supported - Previous Usage. Training of this capability has been utilized in the Haiti earthquake response operations.

7. Cost.

Units Required	Unit Cost	Program Cost
20 Search and Rescue Equip Kits	**$1,100,000**	**$22,000,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

URBAN SEARCH AND RESCUE DEDICATED VEHICLES

1. Background. The need for rapid deployable, self-sustained Urban Search and Rescue (USAR) teams has become evident after multiple natural and manmade disasters in the United States. Disasters such as Hurricane Katrina, Haiti earthquake, and others have shown a need for rapid response by trained and equipped responders to save lives. A dedicated set of response vehicles for deployment with the ANG USAR team is vital to ensure that teams can response quickly and rapidly. These vehicles should be six passenger, short bed, crew cab pickup trucks. The vehicles would remain in a ready status with equipment to provide rescue services within hours of an incident. Each team would need four (4) dedicated vehicles assigned to them for rapid deployment. The vehicles need to be large enough to store all the required equipment for 72 hours of self-sustainment and specialized rescue equipment.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference.

3. Impact If Not Funded. The impact of not funding of ANG USAR teams will result in potential loss of life in the next earthquake, hurricane, terrorist attack, or other disaster in the United States. This team will provide a valuable asset to local communities, state governors, and the Department of Defense for the purpose of saving lives.

4. Units Impacted. Capability will exist in all FEMA regions. See the State / FEMA Matrix for the specific states.

5. Contractor. Multiple available.

6. Contingency Supported - Previous Usage. Not utilized during previous disasters. Provides enhanced capability at all local, state, and federal disasters where a need for specialized rescue is needed.

7. Cost.

Units Required	Unit Cost	Program Cost
80 Trucks (20 Sets of 4 Vehicles)	**$40,000**	**$3,200,000**

Note: All are 3080 Appropriation (Other Procurement)

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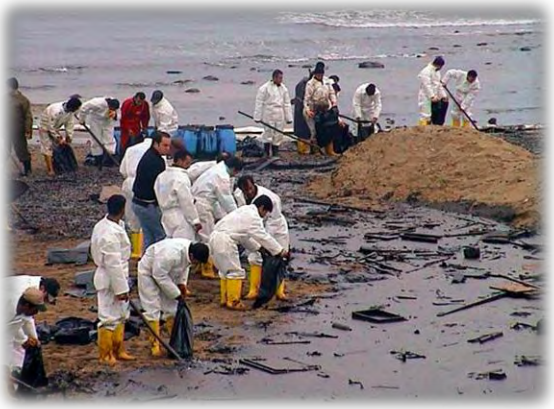
Oil and Hazardous Materials Response

Emergency Support Function (ESF #10) - Oil and Hazardous Materials provides federal support to state and local governments in response to an actual or potential discharge and/or release of hazardous materials following a major disaster or emergency. As an element of the National Response Framework (NRF), ESF #10 may be activated in response to a disaster for which the President, through the Department of Homeland Security (DHS), determines that federal assistance is required to supplement the response efforts of the affected state and local governments.

A natural or other disaster could result in numerous situations in which hazardous materials are released into the environment. Fixed facilities (e.g., chemical plants, tank farms, laboratories, operating hazardous waste sites) that produce, generate, use, store, or dispose of hazardous materials could be damaged so severely that existing spill control apparatus and containment measures are not effective. Hazardous materials that are transported may be involved in rail accidents, highway collisions, or waterway mishaps. Abandoned hazardous waste sites could be damaged, causing further degradation of holding ponds, tanks, and drums. The damage to, or rupture of, pipelines transporting materials that are hazardous if improperly released will present serious problems. Disaster recovery procedures could generate hazardous materials threats to the public health or welfare or to the environment. Terrorism incidents could occur involving Weapons of Mass Destruction (WMD).



Oil and Hazardous Materials Response
2010 Domestic Operations Equipment Requirements Conference

Critical Domestic Operations Capabilities List

- Interoperable National Incident Management System (NIMS)-Compliant Communications with ANG / ARNG and Civilian Agencies
  NOTE: This common critical capability is addressed in ESF #2 - Communications.
- HAZMAT Response Package (Initial Response Package):
  - Personal Protective Equipment (PPE) for Responders (A, B and C suits)
  - HAZMAT Detection Kits
  - Decontamination Equipment
- HAZMAT Waste Storage
- HAZMAT Trailer (Sustainment / Continuity Ops)
- Personal Protective Equipment (PPE) for Support Personnel

Essential Domestic Operations Capabilities List

- HAZMAT Trailer (Sustainment / Continuity Ops)
- Personal Protective Equipment (PPE) for Support Personnel
- Response Vehicles to Assist in Dispersal of Vapor Clouds
- Fatality Search and Recovery / Mortuary Support
- Advanced Ultra Violet Lighting System for Run-Off for Decontamination Efforts

OIL AND HAZARDOUS MATERIALS RESPONSE EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

Program	P.E. Number	2012	2013	2014	2015	2016	Total
HAZMAT Response Package	55879	$0.07	-	-	-	-	$0.07
Personal Protective Equipment (PPE) for Support Personnel	55879	$5.00	-	-	-	-	$5.00

Note: All are 3080 Appropriation (Other Procurement)

- HAZMAT Response Package - Items such as Level B Personal Protective Equipment (PPE), respiratory protection and boots remain a significant limiting factor. When civilian agencies resources have been exhausted and ANG assets are requested, the ANG must self-sustain at least an initial response. ANG must also provide an enhanced detection capability, such as mixtures in water, and be able to clarify the Common Operating Picture (COP).
- Personal Protective Equipment (PPE) for Support Personnel - Many agencies will assist at a large scale HAZMAT event. Security Forces will provide on-scene security; Services will assist victims after decontamination and Medical will provide medical treatment and care.

INFORMATION PAPER

ON

HAZMAT RESPONSE PACKAGE

1. Background. Air National Guard (ANG) units are stocked with decontamination supplies but maintain a limited supply of initial response equipment. Items such as Level B Personal Protective Equipment (PPE), respiratory protection and boots remain a significant limiting factor. When a civilian agency's resources have been exhausted and ANG assets are requested, the ANG must self-sustain at least an initial response. The ANG must also provide an enhanced detection capability, such as mixtures in water, and be able to clarify the Common Operating Picture (COP). Most of the existing equipment is stored and maintained by ANG shops with very limited manning and no emergency response requirement. During the initial phases of a HAZMAT emergency, this equipment will be nearly useless, as it will likely never arrive on scene. Without the appropriate initial response equipment, PPE units will not be capable of assisting at an emergency.

2. Requirement Source. 2010 Domestic Operations Requirements Conference. Lessons learned from responses for September 11th, Hurricane Katrina, as well as the challenges posed regularly supporting existing mutual aid agreements by ANG Fire and Emergency Services.

3. Impact If Not Funded. Responders will be exposed to significant personal risk and will be ineffective at performing the functions they were asked to provide.

4. Units Impacted. All National Guard (NG) Homeland Response Force (HRF) and NG Chemical, Biological, Radiological, Nuclear and Explosive (CBRNE) Enhanced Response Force Package (CERFP) states. See the State / FEMA Region Matrix for the specific states.

5. Contractor. Multiple available.

6. Contingency Supported - Previous Usage. Every domestic incident where ANG units are called to assist civilian authorities.

7. Cost.

Units Required	Unit Cost	Program Cost
27 HAZMAT Response Package PPE Sets	**$2,500**	**$67,500**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

PERSONAL PROTECTIVE EQUIPMENT (PPE) FOR SUPPORT PERSONNEL

1. Background. Many agencies will assist at a large scale Hazardous Material (HAZMAT) event. Security Forces will provide on-scene security; Services will assist victims after decontamination; and Medical will provide medical treatment and care. Items such as rubber gloves, dust masks and eye protection may be required for these agencies to safely do their job and not become additional casualties. Additional stocks of basic PPE will be utilized by both support agencies and emergency responders.

2. Requirement Source. 2010 Domestic Operations Requirements Conference. Lessons learned from responses to September 11th, Hurricane Katrina, as well as the challenges posed regularly to Air National Guard (ANG) Fire and Emergency Services supporting existing mutual aid agreements.

3. Impact If Not Funded. Responders will be exposed to significant personal risk, and will be ineffective at performing the functions they were asked to provide.

4. Units Impacted. All sixty-six (66) ANG Fire and Emergency Services units.

5. Contractor. Multiple vendors.

6. Contingency Supported - Previous Usage. Every domestic incident where ANG units are called to assist civilian authorities in structural firefighting, confined space and technical (car, high-angle, etc.) rescue.

7. Cost.

Units Required	Unit Cost	Program Cost
2,000 Personal Protective Equipment Sets	**$2,500**	**$5,000,000**

Note: All are 3080 Appropriation (Other Procurement)

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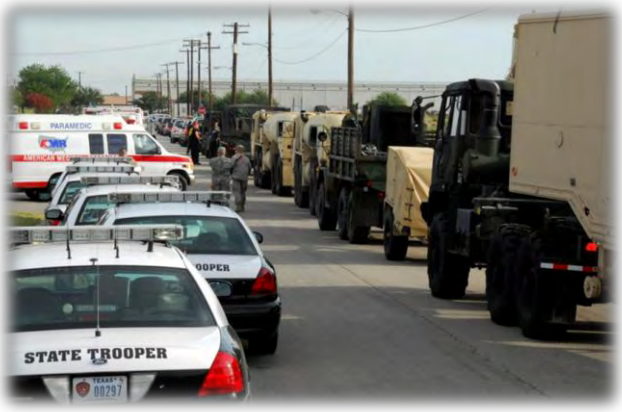
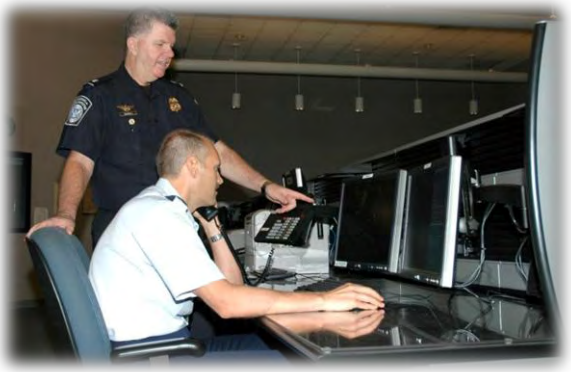
Public Safety and Security

Emergency Support Function (ESF #13) - Public Safety and Security includes facility and resource security; security planning and technical resource assistance; public safety and security support; and traffic and crowd control. It integrates county-wide public safety and security capabilities and resources to support the full range of incident management activities associated with potential or actual Incidents of Critical Significance.



While state, tribal, local, and private-sector authorities have primary responsibility for public safety and security, ESF #13 provides federal public safety and security assistance to support preparedness, response, and recovery priorities in circumstances where state, tribal, and local resources are overwhelmed or inadequate, or where federal-to-federal support is needed or a unique federal capability is required. When activated, ESF #13 coordinates the implementation of federal authorities (to include mission assignments) and resources that are appropriate for the situation and may provide protection and security resources, planning assistance, technology support, and other technical assistance to support incident operations, consistent with federal agency authorities and resource availability.

Security includes measures taken by a military unit, activity, or installation to protect it against all acts designed to, or which may, impair its effectiveness; a condition that results from the establishment and maintenance of protective measures that ensures a state of inviolability from hostile acts or influences; and lastly, with respect to classified matter, the condition that prevents unauthorized persons from having access to official information that is safeguarded in the interests of national security.



Public Safety and Security
2010 Domestic Operations Equipment Requirements Conference

Critical Domestic Operations Capabilities List

- Security Forces Tactical Vehicles
- Interoperable National Incident Management System (NIMS)-Compliant Communications with ANG / ARNG and Civilian Agencies
  NOTE: This common critical capability is addressed in ESF #2 - Communications.
- Enhanced Security and Traffic Control
- Less-Than-Lethal and Civil Disturbance Equipment
- Security Forces Side Arms (M9)

Essential Domestic Operations Capabilities List

- Mobile Multi-Band Radios
- Mobile Fire-Fighting Kits
- Mobile Command Posts / Weapons Storage
- Traffic Control Kits

PUBLIC SAFETY AND SECURITY EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

Program	P.E. Number	2012	2013	2014	2015	2016	Total
Security Forces (SF) Vehicles	52625F	$64.00	$64.00	$64.00	-	-	$192.00
Enhanced Security and Traffic Control Kits	52625F	$3.00	$3.00	-	-	-	$6.00
Less-Than-Lethal Equipment	52625F	$5.20	$5.20	-	-	-	$10.40
Security Forces Small Arms (M-9)	52625F	$0.50	$0.50	-	-	-	$1.00

Note: All are 3080 Appropriation (Other Procurement)

- Security Forces (SF) Vehicles - Provide Air National Guard (ANG) SF the capability of responding to an event with weapons, equipment and essential personnel. They also provide enhanced capability to conduct operations such as checkpoints, road closures, traffic control points, civil disturbance operations, town patrol, and similar "on the street" missions. SF has no tactical vehicles in its inventory. ANG SF only has vehicle authorizations necessary for Force Protection Condition (FPCON) normal base security posting.
- Enhanced Security and Traffic Control (ESTC) Kits - Current use of force options fall between verbal commands and lethal force and are severely restricted due to equipment shortfalls. In most cases, especially during domestic operations, SF are tasked with providing security and traffic control duties. Traffic control points, checkpoints, cordon areas, etc. are a routine part of domestic operations. Currently SF are not equipped to properly perform these functions. ESTC kits are essential to address the eight key National Response Framework Scenario Sets as outlined in the ANG 2010 Domestic Operations Equipment Requirements (DOER) Conference guidance.
- Less-Than-Lethal Equipment - In most cases, especially during domestic operations, the use of less than lethal force is a more appropriate solution than the use of deadly force. Security incidents often involve an increased risk to the public until first responders can secure the scene. Crowd control/civil disturbance kits are essential to address the eight key National Response Framework Scenario Sets as outlined in the ANG 2010 DOERs Conference guidance. Additionally, this kit aligns SF with active duty requirements.
- Security Forces Small Arms (M-9) - Current use of force options vary between verbal commands and lethal force, however are severely restricted due to equipment shortfalls. In most cases, especially during domestic operations, the use of small arms, such as 9mm pistols (M-9), is the standard configuration for law enforcement personnel. Security incidents often involve an increased risk to the public, and it is essential to be armed and equipped the same as civilian counterparts.

INFORMATION PAPER

ON

SECURITY FORCES (SF) VEHICLES

1. Background. Security Forces (SF) are the first responders at home and abroad. Responses range from Presidential Inaugurations and G20 Summits to disaster responses. Tactical vehicles provide SF the capability of responding to an event with weapons, equipment and essential personnel. They also provide enhanced capability to conduct operations such as checkpoints, road closures, traffic control points, civil disturbance operations, town patrol, and similar "on the street" missions. SF have no tactical vehicles in their inventory. Air National Guard (ANG) SF only have vehicle authorizations necessary for Force Protection Condition (FPCON) normal base security posting. ANG SF have no inherent capability to provide vehicles for domestic operations support. ANG SF require vehicles capable of transporting personnel and equipment for security patrols and other domestic operation missions. Procurement of tactical vehicles would be the ideal solution set for this shortfall. It would fulfill the dual purpose of domestic and overseas use. However, due to a pre-established limit the Air Force has established for tactical vehicles, it is impossible to procure any tactical vehicles (e.g. HMMWVs) as any growth would exceed Air Force authorized quantities. These SF vehicles are essential to the eight key National Response Framework Scenario Sets as outlined in the ANG Domestic Operations Equipment Requirements (DOERs) guidance.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference. Lessons learned from domestic operations such as Operation JUMP START (OJS) and Hurricanes Katrina and Rita, as well as Operation ENDURING FREEDOM (OEF) and Operation IRAQI FREEDOM (OIF).

3. Impact If Not Funded. Security Forces members will not have the capability to respond to domestic operations and will be forced to rely on ad-hoc vehicles. This will directly impact the mission, and have a negative impact on mission success.

4. Units Impacted. All ANG SF units.

5. Contractor. TBD.

6. Contingency Supported - Previous Usage: Hurricanes Katrina, Rita, and Ivan, Democratic and Republican National Conventions, Olympics, Super Bowl, G8/G20 Summits, Presidential Inauguration, OJS, OIF, OEF, and Operations NOBLE EAGLE and SOUTHERN WATCH.

7. Cost.

Units Required	Unit Cost	Program Cost
1700 Mid-Size Vehicles	**$ 75,000**	**$ 127,500,000**
500 Large-Size Vehicles	**$ 125,000**	**$ 62,500,000**
Total		**$ 190,000,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

ENHANCED SECURITY AND TRAFFIC CONTROL KITS

1. Background. Security Forces (SF) are the first responders of choice at home and abroad. Responses range from Presidential Inaugurations and G20 Summits to disaster responses. Current use of force options between verbal commands and lethal force are severely restricted due to equipment shortfalls. In most cases, especially during domestic operations, SF are tasked with providing security and traffic control duties. Traffic control points, checkpoints, cordon areas, etc. are a routine part of domestic operations. Currently SF are not equipped to properly perform these functions. Enhanced Security and Traffic Control (ESTC) kits are essential to address the eight key National Response Framework Scenario Sets as outlined in the Air National Guard (ANG) 2010 Domestic Operations Equipment Requirements (DOER) Conference guidance. These kits also provide necessary safety equipment (reflective vests, cones, signage, etc.) that is currently unavailable to SF members performing these tasks. Additionally, the ESTC kits provide an additional capability to better provide security and control for any domestic scenario.

2. Requirement Source. Lessons learned from domestic operations such as Operation JUMP START (OJS), Hurricanes Katrina and Rita, Operation ENDURING FREEDOM (OEF), and Operation IRAQI FREEDOM (OIF).

3. Impact If Not Funded. Failure to procure these equipment items significantly degrades mission effectiveness and places ANG SF performing these tasks in jeopardy. These kits allow for SF response using the minimum amount of force necessary, combined with personal safety equipment necessary for mission accomplishment. Failure to procure increases both vulnerability of SF personnel and the risk of harm to the public. The lack of enhanced security and traffic control kits for SF will negatively impact the ability to establish and maintain control during domestic operations.

4. Units Impacted. All ANG SF units.

5. Contractors. TBD.

6. Contingency Supported - Previous Usage: Hurricanes Katrina, Rita, and Ivan, Democratic and Republican National Conventions, Olympics, Super Bowl, G8/G20 Summits, Presidential Inauguration, OJS, OIF, OEF, and Operation NOBLE EAGLE.

7. Cost.

Units Required	Unit Cost	Program Cost
600 Enhanced Security Kits	**$ 6,000**	**$ 3,600,000**
600 Traffic Control Kits	**$ 4,000**	**$ 2,400,000**
Total		**$ 6,000,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

LESS-THAN-LETHAL EQUIPMENT

1. Background. Security Forces (SF) are the first responders of choice at home and abroad. Responses range from Presidential Inaugurations and G20 Summits to disaster responses. Current use of force options between verbal commands and lethal force are severely restricted due to equipment shortfalls. In most cases, especially during domestic operations, the use of less-than-lethal force is a more appropriate solution than the use of deadly force. Security incidents often involve an increased risk to the public until first responders can secure the scene. Crowd control/civil disturbance kits are essential to address the eight key National Response Framework Scenario Sets as outlined in the Air National Guard (ANG) 2010 Domestic Operations Equipment Requirements (DOER) Conference guidance. Additionally, this kit aligns SF with active duty requirements. A single kit equips a squad of thirteen with two tasers and less-than-lethal munitions such as bean bag rounds and tear gas. In addition, each kit contains helmets, pads, shields, batons, and Oleoresin Capsicum (pepper) spray for each member.

2. Requirement Source. Lessons learned from domestic operations as well as Operation ENDURING FREEDOM (OEF), Operation IRAQI FREEDOM (OIF), and both the 2009 and 2010 ANG DOERs Conferences.

3. Impact If Not Funded. Failure to procure these individual equipment items significantly degrades mission effectiveness. These kits allow for SF response using the minimum amount of force necessary for mission accomplishment. Failure to procure increases both vulnerability of SF personnel and the risk of harm to the public. The lack of less-than-lethal options for SF will negatively impact the ability to establish and maintain control during domestic operation situations.

4. Units Impacted. All ANG SF units.

5. Contractors. Crowd Control/Civil Disturbance Kits: TBD. Taser International, Scottsdale, AZ.

6. Contingency Supported - Previous Usage: Hurricanes Katrina, Rita, and Ivan, Democratic and Republican National Conventions, Olympics, Super Bowl, G8/G20 Summits, Presidential Inauguration, Operation JUMP START, OIF, OEF, and Operations NOBLE EAGLE and SOUTHERN WATCH.

7. Cost.

Units Required	Unit Cost	Program Cost
400 Crowd Control / Civil Disturbance Kits	**$20,000**	**$8,000,000**
4000 Tasers	**$600**	**$2,400,000**
Total		**$10,400,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

SECURITY FORCES SMALL ARMS (M-9)

1. Background. Security Forces (SF) are the first responders of choice at home and abroad. Responses range from Presidential Inaugurations and G20 Summits to disaster responses. Current use of force options between verbal commands and lethal force are severely restricted due to equipment shortfalls. In most cases, especially during domestic operations, the use of small arms such as the 9mm pistol (M-9) is the standard configuration for law enforcement personnel. Security incidents often involve an increased risk to the public, and it is essential to be armed and equipped the same as civilian counterparts. The ability to equip with the required small arms is essential to address the eight key National Response Framework Scenario Sets as outlined in the Air National Guard (ANG) 2010 Domestic Operations Equipment Requirements (DOERs) Conference guidance.

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference. Lessons learned from domestic operations as well as Operation ENDURING FREEDOM (OEF) and Operation IRAQI FREEDOM (OIF).

3. Impact If Not Funded. Failure to procure additional M-9 pistols will significantly degrade mission effectiveness. The M-9 pistol allows for SF responders to equally equip with the small arms of their civilian counterparts. Failure to procure this small arms capability increases both vulnerability of SF personnel and the risk of harm to the public. The lack of required small arms will negatively impact the ability to properly equip ANG SF during domestic operations situations.

4. Units Impacted. All ANG SF units.

5. Contractors. Air Force Small Arms Depot - Warner Robins Air Logistics Center.

6. Contingency Supported - Previous Usage: Hurricanes Katrina, Rita, and Ivan, Democratic and Republican National Conventions, Olympics, Super Bowl, G8/G20 Summits, Presidential Inauguration, Operation JUMP START, OIF, OEF, and Operations NOBLE EAGLE and SOUTHERN WATCH.

7. Cost.

Units Required	Unit Cost	Program Cost
2500 M-9 Pistols	**$400**	**$1,000,000**

Note: All are 3080 Appropriation (Other Procurement)

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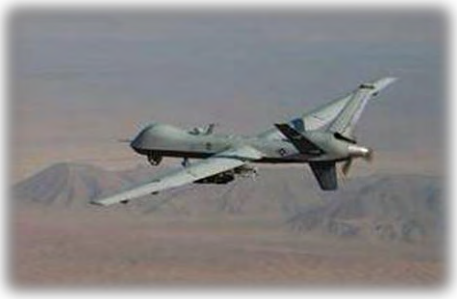
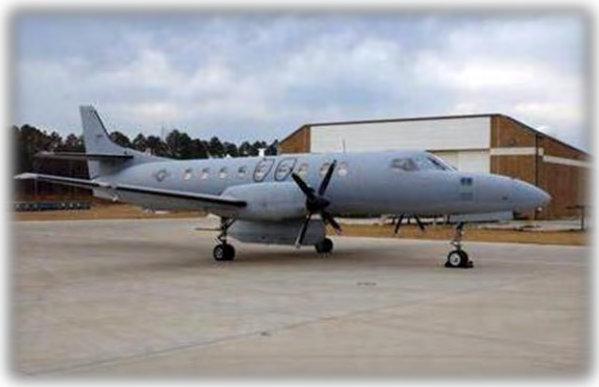
Incident Awareness and Assessment

Incident Awareness and Assessment (IAA) - Includes domestic, non-intelligence activities used in support of Defense Support of Civil Authorities. IAA mission areas include search and rescue, broad area coverage, damage assessment, situational awareness, and analysis.

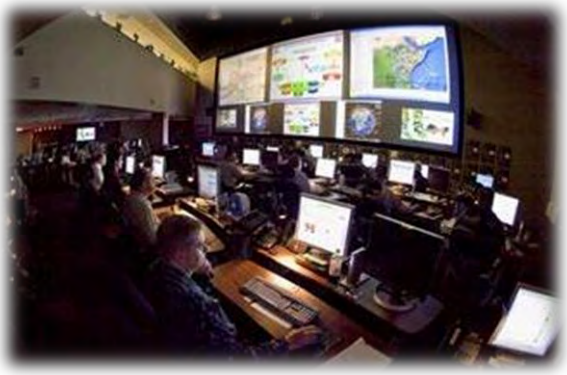


IAA assets are dual-capable for domestic and military operations. These include Remotely Piloted Aircraft (RPA) (e.g., MQ-1 Predator, MQ-9 Reaper), manned platforms such as the RC-26B and E-8C JSTARS, and the ground-based Distributed Common Ground System (DCGS). IAA assets employ a wide variety of sensors to provide real/near-real time data to incident commanders and IAA specialists at all levels.



The MQ-1/9 are medium-to-high altitude, long-endurance RPA systems providing electro-optical and infrared full motion video. The RC-26B is a manned platform providing full motion video and high-resolution still frame imagery. JSTARS employs an E-8C with a side-looking Synthetic Aperture Radar (SAR) and ground-based network to provide ground moving target indicator and SAR imagery. The DCGS is a network-centric system responsible for Processing, Analysis, and Dissemination (PAD) of data and information from airborne, national, and commercial assets.

The MQ-1 is flown by ND, AZ, TX, and CA ANG units. The NV ANG supports MQ-1 aircrew training. The NY ANG began MQ-9 flight operations in 2009. There are eleven RC-26B aircraft flown by ANG units in the following states: AL, AZ, CA, FL, MS, NM, NY, TX, WA, WI, and WV. The GA ANG has the only JSTARS unit. The DCGS has six multi-intelligence Distributed Ground Stations (DGS) in AL, AR, IN, KS, MA, and NV with two classic associate units in CA and VA. Support units for DCGS are located in GA, HI, OH, and UT, with a training squadron in TX.



Incident Awareness and Assessment
2010 Domestic Operations Equipment Requirements Conference

Critical Domestic Operations Capabilities List

- Fully Mission Capable Incident Awareness and Assessment (IAA) Platforms and Sensors
- Unclassified Processing, Analysis, and Dissemination (PAD) System
- Unclassified PAD Network
- Situational Awareness / Sense and Avoid Tools for Remotely Piloted Aircraft Ground Control Stations

INCIDENT AWARENESS AND ASSESSMENT (IAA) EXECUTIVE SUMMARY

Domestic Operations Funding Profiles ($ Million)

Program	P.E. Number	2012	2013	2014	2015	2016	Total
Fully Mission Capable IAA Platforms and Sensors	52889F [3] 27249F [4]	$47.46 [1]	-	-	-	-	$47.46
Unclassified Processing, Analysis, and Dissemination System	55208F	$6.50 [1]	-	-	-	-	$6.50
Unclassified Processing, Analysis, and Dissemination Network	55208F	$0.65 [1] $0.60 [2]	- $0.60 [2]	- $0.60 [2]	- $0.60 [2]	- $0.60 [2]	$3.65
Situational Awareness / Sense and Avoid Tools for RPA GCS	53219F	$0.85 [1]	-	-	-	-	$0.85
ANG Distributed Ground Station (DGS) Ground Receive Equipment for RC-26B IAA Operations	55208F	$2.75	-	-	-	-	$2.75

Note: [1] 3080 Appropriation [2] 3840 Appropriation [3] RC-26B [4] Targeting Pods

- Fully Mission Capable IAA Platforms and Sensors - Includes the Block 30 upgrade to eleven (11) RC-26B aircraft allowing them to remain air worthy, and Video Down Link kits for targeting pods allowing targeting pod equipped ANG units to support DSCA / National Guard Support to Civil Authority (NGSCA) operations.
- Unclassified Processing, Analysis, and Dissemination System - Provides 13 Advanced Intelligence Multi-Media Suites (AIMES), that provide ANG units with Geospatial Analysts an unclassified system to analyze sensor data and pass to first responders, Joint/Emergency Operations Centers and other emergency personnel/agencies.
- Unclassified Processing, Analysis, and Dissemination Network - Provides ANG IAA units with communications equipment to communicate assessment analysis and information to first responders, emergency/joint operations centers personnel, and other emergency agencies.
- Situational Awareness / Sense and Avoid Tools for Remotely Piloted Aircraft (RPA) Ground Control Stations (GCSs) - Provides a Tactical Display Framework / Multi-Sensor Correlator Tracker.
- ANG DGS Ground Receive Equipment for RC-26B IAA Operations - Processes, analyzes, and disseminates RC-26B imagery, to support DSCA and other domestic operations providing RC-26B imagery capability not normally residing in a state.

INFORMATION PAPER

ON

FULLY MISSION CAPABLE INCIDENT AWARENESS AND ASSESSMENT (IAA) PLATFORMS AND SENSORS

1. Background. ANG units maintain and operate several platforms and sensors that are not currently available to provide real time imagery sensor data to ANG ISR units / personnel for analysis and dissemination to state and federal agencies in support of Homeland Defense (HLD) and National Guard Support to Civil Authority (NGSCA) operations. A variety of ANG aircraft, are capable of collecting Electro-Optical (EO) and Infrared (IR) video in support of IAA taskings. The ANG needs the capability to distribute this video to ISR units in near real time.

2. Requirement Source. USAF Katrina / Rita Lessons Learned, 2006; USAF Homeland Defense Conference Briefs, 27 Feb - 1 Mar 2007; California wildfires, 2007-2009.

3. Impact If Not Funded. ANG Video Down Link (VDL) capability will continue to degrade in support of HD/NGSCA operations. Support cannot be provided in a timely manner, adversely impacting Search and Rescue (SAR) operations.

4. Units Impacted. All RC-26B units and all units with Sniper / Litening targeting pods. See State / FEMA Matrix for the specific states.

5. Contractor. RC-26B (URS, San Antonio, TX); VDL Kit (TBD).

6. Contingency Supported - Previous Usage: Will be used for future domestic incident responses.

7. Cost.

Units Required	Unit Cost	Program Cost
11 Block 30 Upgrade to RC-26B	**$3,520,000**	**$38,720,000**
92 VDL Kits for Targeting Pods	**$95,000**	**$8,740,000**
Total		**$47,460,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

UNCLASSIFIED PROCESSING, ANALYSIS, AND DISSEMINATION (PAD) SYSTEM

1. Background. ANG Intelligence, Surveillance, and Reconnaissance (ISR) units have highly trained and experienced Imagery Analysts at units located in each of the ten Federal Emergency Management Agency (FEMA) regions. However, the units are not capable of processing imagery from multiple sources at the unclassified level; effectively inhibiting a valuable ANG resource from supporting Homeland Defense (HLD) or Defense / National Guard Support to Civil Authorities (DSCA/NGSCA) operations. Installing an unclassified PAD system and network will allow unit personnel at home station to provide direct imagery analysis support to first responders, state and federal agencies and other involved parties.

2. Requirement Source. USAF Katrina / Rita Lessons Learned, 2006; USAF Homeland Defense Conference Briefs, 27 Feb - 1 Mar 2007; California wildfires, 2007-2009; Haiti earthquake operations, 2010; Gulf of Mexico Oil Spill, 2010; ANG Domestic Operations Equipment Requirements (DOERs) Conference, 2010.

3. Impact If Not Funded. ANG support to HLD or DSCA/NGSCA operations will remain degraded. Support cannot be provided in a timely manner, negatively affecting civil agency Search & Rescue (SAR) operations.

4. Units Impacted.

101 IS	Otis ANGB, MA	152 IS	Reno, NV	201 IS	Kunia, HI
117 IS	Birmingham, AL	161 IS	Wichita, KS	217 TRS	San Angelo, TX
123 IS	Little Rock, AR	169 IS	Salt Lake City, UT	234 IS	Sacramento, CA
137 IS	Terre Haute, IN	178 IS	Dayton, OH		
139 IS	Fort Gordon, GA	192 IS	Langley AFB, VA		

5. Contractor. SAIC, McLean, VA; WR-ALC/560 ASG, Robins AFB, GA.

6. Contingency Supported - Previous Usage: Will be used for future domestic incident responses.

7. Cost.

Units Required	Unit Cost	Program Cost
13 Advanced Intelligence Multi-Media Suites (AIMES)	**$500,000**	**$6,500,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

UNCLASSIFIED PROCESSING, ANALYSIS, AND DISSEMINATION (PAD) NETWORK

1. Background. ANG Intelligence, Surveillance, and Reconnaissance (ISR) units have highly trained and experienced Geospatial Analysts at units located in each of the ten FEMA regions. However, the units do not have an enterprise unclassified PAD network to ingest geospatial data from multiple platforms and sensors, transmit it to an analysis center and then disseminate the information to first responders, state and federal agencies in support of Homeland Defense (HLD) or Defense / National Guard Support to Civil Authorities (DSCA/NGSCA) operations. Establishing an unclassified PAD network will allow ANG ISR units and personnel at home station and forward at Emergency Operation Centers (EOC) to provide direct geospatial analysis.

2. Requirement Source. USAF Katrina/Rita Lessons Learned, 2006; USAF Homeland Defense Conference Briefs, 27 Feb - 1 Mar 2007; California wildfires, 2007-2009; Haiti, 2010; Gulf of Mexico Oil Spill, 2010; ANG 2010 Domestic Operations Equipment Requirements (DOERs) Conference.

3. Impact If Not Funded. ANG support to HLD or DSCA/NGSCA operations will remain degraded. Support cannot be provided in a timely manner, negatively affecting civil agency Search and Rescue (SAR) operations.

4. Units Impacted.

101 IS	Otis ANGB, MA	152 IS	Reno, NV	201 IS	Kunia, HI
117 IS	Birmingham, AL	161 IS	Wichita, KS	217 TRS	San Angelo, TX
123 IS	Little Rock, AR	169 IS	Salt Lake City, UT	234 IS	Sacramento, CA
137 IS	Terre Haute, IN	178 IS	Dayton, OH		
139 IS	Fort Gordon, GA	192 IS	Langley AFB, VA		

5. Contractor. TBD

6. Contingency Supported - Previous Usage: Will be used for future domestic incident responses.

7. Cost.

Units Required	Unit Cost	Program Cost
13 Segovia VSAT Hardware	**$50,000**	**$650,000** [1]
5 Enterprise Wide, Yearly Dedicated 2048 Kbps Up/Down SATCOM Service	**$600,000**	**$3,000,000** [2]
Total		**$3,650,000**

Note: [1] 3080 Appropriation [2] 3840 Appropriation

INFORMATION PAPER

ON

SITUATIONAL AWARENESS / SENSE AND AVOID TOOLS FOR REMOTELY PILOTED AIRCRAFT (RPA) GROUND CONTROL STATIONS (GCSs)

1. Background. Air National Guard (ANG) RPA units require improved situational awareness displays in their GCSs in order to maximize situational awareness and RPA flight safety. ANG RPA assets performing missions related to Homeland Defense (HLD) or Defense / National Guard Support to Civil Authorities (DSCA/NGSCA) [IAW 32 USC 904, 32 CFR 185, JP 3-27 & 28] require the ability to monitor and avoid cooperative and non-cooperative air traffic. Next generation sense and avoid technologies do not currently comply with the Federal Aviation Administration (FAA) requirement for "see and avoid" (FAR 91.113). Therefore, situational awareness displays will serve as an intermediate situational awareness-improving system until the requirement is defined by the FAA. Installing an unclassified situational awareness display is achievable via existing technological solutions (e.g., AMOSS, JRE, TDF/MSCT). The ideal system will balance costs and operational interfaces for all partners (ANG, Customs and Border Protection (CBP), etc.).

2. Requirement Source. 2010 Domestic Operations Equipment Requirements Conference. Lessons learned from Hurricane Katrina.

3. Impact If Not Funded. If not funded, this will result in reduced situational awareness for our RPA crews, possibly impacting safety with regard to both domestic IAA and contingency ISR operations. Additionally, it will further delay ANG RPA ability to comply with Federal Aviation Regulations requirements for "see and avoid," negatively impacting the ability of ANG to meet RPA training requirements and provide IAA DSCA, emergency, and disaster support.

4. Units Impacted:

119 WG	Fargo, ND	163 RW	March AFB, CA	178 ISRW	Springfield, OH
147 RW	Ellington Fld, TX	174 WG	Syracuse, NY	214 RG	Davis-Monthan AFB, AZ

5. Contractor. L-3, Raytheon.

6. Contingency Supported - Previous Usage: Will be used for future domestic incident responses.

7. Cost.

Units Required	Unit Cost	Program Cost
17 Ground Control Station Upgrades	**$50,000**	**$850,000**

Note: All are 3080 Appropriation (Other Procurement)

INFORMATION PAPER

ON

ANG DISTRIBUTED GROUND STATION (DGS) GROUND RECEIVE EQUIPMENT FOR RC-26B IAA OPERATIONS

1. Background. The Air National Guard (ANG) has a mix of Incident Awareness and Assessment (IAA) capability located in each of the five Federal Emergency Management Agency (FEMA) region pairs. Personnel in these units have unique skills to process and analyze various types of imagery and data, which makes the units ideally suited to provide Defense Support to Civil Authorities (DSCA) and consequence management during domestic response IAA operations. Currently, only one of the FEMA Region pairs has the ability to receive RC-26B imagery. Providing the same capability to the other five (5) ANG DGS units will dramatically increase ANG ability to provide RC-26B imagery products to first responders nationally during Homeland Defense / Civil Support events.

2. Requirement Source. USAF Katrina/Rita lessons learned, 2006; USAF Homeland Defense Conference Briefs, 27 Feb - 1 Mar 2007; California wildfires, 2007-2009; and 2010 Domestic Operations Equipment Requirements Conference.

3. Impact If Not Funded. ANG support to DHS/DSCA and civil support operations will remain degraded. Support cannot be provided in a timely manner, negatively affecting civil agency search and rescue (SAR) operations.

4. Units Impacted.

101 IS	Otis ANGB, MA	152 IS	Reno, NV
117 IS	Birmingham, AL	161 IS	Wichita, KS
137 IS	Terre Haute, IN		

5. Contractor. Dragoon Technologies, Sterling, VA; Harris Corp, Rochester, NY.

6. Contingency Supported - Previous Usage. Hurricanes Katrina and Rita.

7. Cost.

Units Required	Unit Cost	Program Cost
5 High Gain Ground Stations, 3DL-GS-01	**$ 200,000**	**$ 1,000,000**
5 AN/PRC 117G	**$ 50,000**	**$ 250,000**
5 INMARSAT BGAN Connectivity	**$ 100,000**	**$ 500,000**
5 Ecostorm Data Server Equipment	**$ 200,000**	**$ 1,000,000**
Total		**$ 2,750,000**

Note: All are 3080 Appropriation (Other Procurement)